



**REPUBLIC OF CYPRUS**  
**MINISTRY OF LABOUR, WELFARE AND SOCIAL INSURANCE**  
**DEPARTMENT OF LABOUR INSPECTION**  
**RADIATION INSPECTION AND CONTROL SERVICE**

**National Report**  
**of the Republic of Cyprus**

**on the implementation of the Directive 2009/71/Euratom,**  
**as amended by Directive 2014/87/Euratom**

**Nicosia, Cyprus**  
**July 2020**

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## Abbreviations

(in alphabetical order)

ARTEMIS	Integrated Review Service for Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation Programmes (of IAEA)
CBRN-E	Chemical, Biological, Radiological, Nuclear – Explosive (threats)
CNS	Convention on Nuclear Safety
DLI	Department of Labour Inspection
ECURIE	European Commission Urgent Radiological Information Exchange
ENSREG	(EU) High-level Group on Nuclear Safety and Waste Management
EU	European Union
Euratom	European Atomic Energy Community
EURDEP	European Radiological Data Exchange Platform
GSR	Generic Safety Requirements (of IAEA)
HERCA	Heads of European Radiological Protection Competent Authorities
IAEA	International Atomic Energy Agency
IRRS	Integrated Regulatory Review Service (of IAEA)
ITDB	Incident and Trafficking Database (of IAEA)
IRMIS	International Radiation Monitoring Information System of IAEA)
MLWSI	Minister of Labour, Welfare and Social Insurance
R.A.A.	Regulatory Administrative Act
RICS	Radiation Inspection and Control Service
TLC	Technical Licensing Committee
UNECE	United Nations Economic Commission for Europe
USIE	Unified System for Information Exchange in Incidents and Emergencies (of IAEA)

## Section A. Introduction

### *1. Basis and purpose*

The Republic of Cyprus (“Cyprus” hereafter) is a member state of the European Union (EU) since 1 May 2004.

The Council Directive 2009/71/Euratom of 25 June 2009 on establishing a Community framework for the nuclear safety of nuclear installations has been transposed to the national legislation through the “Protection from Ionising Radiation and Nuclear Safety (Amendment) Law of 2011” [L. 127(I)/2011]. This law was published in the Official Journal of the Republic and entered into force on 7.10.2011 and has been communicated to the services of the Commission pursuant to the provisions of article 10, paragraph 2, of the Directive. In fulfilment of the provisions of Article 9, paragraph 1, of the Directive, Cyprus has submitted to the European Commission its first implementation report in July 2014.

The Council Directive 2014/87/Euratom of 8 July 2014, amending Directive 2009/71/Euratom establishing a Community framework for the nuclear safety of nuclear installations, has been transposed to the national legislation through the “Protection from Ionising Radiation and Nuclear Safety (Amendment) Law of 2017” [L. 122(I)/2017]. This law was published in the Official Journal of the Republic and entered into force on 28.7.2017 and has also been communicated to the services of the Commission via MNE(2017)54350, together with an explanatory document via MNE(2017)54351.

Upon the revision of the legislative framework in Cyprus on nuclear and radiological safety and security in December 2018, the respective provisions of the Nuclear Safety Directive, as amended, have been considered under the Protection against Ionising Radiation and Nuclear and Radiological Safety and Security Law of 2018 [L. 164(I)/2018] (“the Law” hereafter). The Law was published in the Official Journal of the Republic and entered into force on 21.12.2018 and has been communicated to the services of the Commission via MNE(2019)50150, together with an explanatory document via MNE(2019)50151.

This is the second report of Cyprus submitted in fulfilment of Article 9, paragraph 1, of the amended Nuclear Safety Directive on the implementation of the provisions of the Directive.

### *2. Applications of ionising radiation*

Cyprus has no nuclear power reactor units and the use of nuclear energy for the generation of electric power is not considered by the Government of Cyprus (“the Government” hereafter) in the country’s energy mix in the foreseeable future. Also, Cyprus has no research reactors, nor does it operate any other nuclear installations or uranium or thorium mines. The management of spent fuel is prohibited by law. The main use of ionising radiation in the country is in medicine, industry and education / research. All radioactive sources and radiation generators used in the country are imported from abroad. Radioactive waste is produced mainly in nuclear medicine applications.

### *3. Cyprus efforts to achieve a comprehensive framework for nuclear and radiological safety*

Cyprus is committed to the promotion and maintenance of high levels of nuclear and radiological safety and of an effective nuclear safety culture.

Cyprus has established a comprehensive legal, regulatory and administrative framework for radiation protection and nuclear and radiological safety, which is in line with the EU Acquis and the International Atomic Energy Agency (IAEA) standards. This framework has been revised during the past years, in harmonisation with the relevant European Atomic Energy Community (Euratom) legislative instruments on nuclear safety, radioactive waste management and radiation protection.

The administration of the legislation on nuclear and radiological safety and radiation protection is assigned to the regulatory authority, i.e. the Minister of Labour, Welfare and Social Insurance (MLWSI), as defined under the Law, acting through the Radiation Inspection and Control Service (RICS) of the Department of Labour Inspection (DLI).

A comprehensive policy and strategy on safety has been adopted in 2019, in accordance with the national legislation and the Euratom and IAEA safety standards, and serves as the national commitment to address all issues in the field of nuclear and radiological safety and the protection against ionising radiation, in a coordinated, cooperative and sustainable manner. The policy and strategy outlines the general orientation of the regulatory authority towards further applying a graded approach in the regulatory control, in accordance with national conditions and the radiation risks associated with facilities and activities in the country, in order to protect humans and the environment from the harmful effects of ionising radiation, taking into consideration the European and international commitments of the country, the current scientific data and the specific issues of radiation protection and nuclear and radiological safety in Cyprus.

The national policy and framework on nuclear and radiological safety reflects two fundamental principles: (a) the national responsibility to establish and maintain adequate levels for nuclear and radiological safety of facilities and installations, as endorsed by the relevant Euratom legislative instruments; and (b) the prime responsibility of the license holders for the nuclear and radiological safety of a facility / installation, under the supervision of the regulatory authority. Cyprus recognises the importance to ensure, as an integrated part of nuclear and radiological safety, the safe and responsible management of radioactive waste, expressed through the national obligations posed by the Directive 2011/70/Euratom. Relevant information on the safety of radioactive waste management in the country can be found at the national reports submitted in the three-year cycles under the Directive 2011/70/Euratom.

Cyprus has also strengthened its efforts for national coordination and international participation and cooperation, as well as in getting benefit from independent peer review assessments of the national framework.

## Section B. Reporting article by article

### 1. Article 4 – Legislative, regulatory and organisational framework

Cyprus has established a comprehensive legal, regulatory and administrative framework for radiation protection and nuclear and radiological safety, which is in line with the EU Acquis and the IAEA standards. This framework has been revised during the past years, in harmonisation with the relevant Euratom legislative instruments on nuclear and radiological safety, including radioactive waste management safety, transport safety and radiation protection.

#### 1.1 Legislative framework

The legislative basis for nuclear and radiological safety and security and for radiation protection in Cyprus consists of the Law, which was enacted on 21 December 2018. The Law has repealed and replaced the Protection against Ionising Radiation and Nuclear Safety Law of 2002, as amended in 2009, 2011 and 2017, harmonising the national legal framework with the provisions of the European Directives on the nuclear safety of nuclear installations (Directive 2009/71/Euratom, as amended by Directive 2014/87/Euratom) and on the basic safety standards for protection against the dangers arising from exposure to ionising radiation (Directive 2013/59/Euratom). Therefore, all the nuclear safety provisions included in the 2011 and 2017 law amendments have been repealed and transferred to the Law L. 164(I)/2018. Moreover, the Law harmonises the national legal framework with the IAEA safety standards, mainly GSR Part 1 (rev. 1), GSR Part 3 and the Code of Conduct on the Safety and Security of Radioactive Sources.

Article 62 of the Law empowers the Council of Ministers of the Republic to issue Regulations for various issues arising from the Law. The existing sets of Regulations issued under the Law are as following:

- (a) “The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Basic Safety Standards for the Protection against the Dangers Arising from Exposure to Ionising Radiation) Regulations of 2018” (R.A.A. 374/2018);
- (b) “The Protection against Ionising Radiation and Nuclear Safety (Responsible and Safe Management of Spent Fuel and Radioactive Waste) Regulations of 2014” (R.A.A. 178/2014);
- (c) “The Protection against Ionising Radiation (Supervision and Control of Shipments of Radioactive Waste and Spent Fuel) Regulations of 2009” (R.A.A. 86/2009); and
- (d) “The Protection against Ionising Radiation and Nuclear Safety (Protection of the Health of the General Public from Radioactive Substances in Water Intended for Human Consumption) Regulations of 2016” (R.A.A. 54/2016).

Other Regulatory Administrative Acts or Individual Administrative Acts issued under the Law by the MLWSI or the Chief Inspector (please refer to Section 1.2.4 “Inspection”) in the form of Orders or Notifications (Standards, Specifications or Codes of Practice) concern the following issues:

- (a) the prescribed fees for the services offered by the regulatory authority;
- (b) the appointment of the members of the Council of Nuclear Safety and Radiation Protection, as described under Article 61 of the Law;
- (c) general authorisation (registration) conditions for common practices with radiological equipment (dental and veterinary practices);
- (d) practices, procedures and requirements of regulatory control relating to the notification or the granting of authorisation through registration or licensing;
- (e) recognition of services and experts in the field of radiation protection and nuclear and radiological safety and security;
- (f) education and training in radiation protection and nuclear and radiological safety and security;

- (g) the control and recovery of orphan radioactive sources and for responding to emergencies due to orphan sources;
- (h) a monitoring programme of the quality from radiological point of view of the water intended for human consumption;
- (i) control of building materials and classes or types of practice involving naturally-occurring radioactive material that lead to exposure which cannot be disregarded from a radiation protection point of view;
- (j) radiation protection of members of the public;
- (k) designation of controlled and supervised areas;
- (l) role, responsibilities and practices for which the appointment of a radiation protection officer is required;
- (m) diagnostic reference levels for radiodiagnostic examinations;
- (n) individual radiological monitoring;
- (o) local rules and monitoring of controlled or supervised areas;
- (p) safety risk assessment; and
- (q) the management system in workplaces.

In addition, the Euratom Treaty and relevant European Regulations, Decisions, Conventions or other legal instruments ratified or signed by the EU apply in Cyprus as a member of the EU. The European Acquis prevails of the national constitution and national legislative framework.

Furthermore, Cyprus has ratified all the five safety-related international Conventions under the auspices of IAEA:

- (a) the Convention on Nuclear Safety (CNS);
- (b) the Convention on Early Notification of a Nuclear Accident;
- (c) the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency;
- (d) the Convention on Physical Protection of Nuclear Material and its 2005 Amendment; and
- (e) the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management,

has ratified, signed or accessed to in other Conventions, Protocols, Agreements and other Instruments in the area of nuclear energy and ionising radiation, such as:

- (a) The Comprehensive Nuclear Test Ban Treaty;
- (b) The Treaty on the Non-Proliferation of Nuclear Weapons;
- (c) The Safeguards Agreement between Cyprus and the IAEA for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons;
- (d) The Protocol Additional to the Safeguards Agreement;
- (e) The Agreement between the European Atomic Energy Community, and the Member States without nuclear weapons and the IAEA, in application of Annexes 1 and 4 of Article III of the Treaty on the Non-Proliferation of Nuclear Weapons and its Additional Protocol; and
- (f) The Convention for the Suppression of Acts of Nuclear Terrorism.

and applies the United Nations Security Council Resolution No. 1540.

The Government has made in 2015 a political commitment to the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary Guidance on the Import and Export of Radioactive Sources and thus, endeavours to follow the guidance in the Code and its accompanying Guidance on the Import and Export of Radioactive Sources.

It also applies the relevant international standards for transport of radioactive materials, by road, sea or air, namely:

- (a) The revised IAEA Safety Regulations for the Transport of Radioactive Materials (SSR-6 rev. 1);
- (b) The United Nations Recommendations on the Transport of Dangerous Goods;
- (c) The European Agreement Concerning the International Carriage of Dangerous Goods by Road;
- (d) The International Maritime Dangerous Goods Code;
- (e) The International Civil Aviation Organisation Technical Instructions on the Safe Transport of Dangerous Goods; and
- (f) The Universal Postal Union Convention.

No railway or river transport exist in Cyprus.

Other associated Conventions and Protocols ratified by Cyprus on environmental impact assessment and public participation to decision-making issues are the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention and its amendment), its associated Protocol (United Nations Economic Commission for Europe (UNECE) Kiev Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context), and the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) and its Protocol on Pollutant Release and Transfer Registers. The MLWSI has competence on environmental impact assessment in a transboundary context for nuclear installations / ionising radiation.

The Law applies to:

- (a) any planned, existing or emergency exposure situation which involves a risk from exposure to ionising radiation or radioactive contamination or releasing or dispersing radioactive substances, which cannot be disregarded from a radiation protection point of view or with regard to the environment in view of long-term human health protection (article 3(1)(a) of the Law); and
- (b) all non-military nuclear installations or installations where ionising radiation practices take place on the basis of authorisation required according to section 14 of the Law (article 3(1)(b) of the Law).

The Law covers both natural and artificial sources of ionising radiation, defines national roles and responsibilities in order to protect individuals, society and the environment, and covers aspects such as:

- (a) nuclear and radiological safety and security;
- (b) occupational exposure (including outside workers);
- (c) public exposure;
- (d) medical exposure;
- (e) transport and shipments of radioactive material;
- (f) radioactive waste management;
- (g) illicit trafficking and regaining control over orphan sources;
- (h) education, training and provision of information to all persons and parties with allocated responsibilities with regard to nuclear and radiation safety and security;
- (i) environmental radioactivity monitoring; and
- (j) radiation emergency preparedness and response.

In particular to nuclear and radiological safety, the Law applies, inter alia, to the safety of the entire lifecycle of nuclear installations and other facilities where ionising radiation is used or is intended to be used and for which an authorisation is required, i.e. siting, design, construction, commissioning, operation, maintenance, shutdown, closure, dismantling, decommissioning or demolition and reinforces a number of mechanisms, such as defence-in-depth measures, on-site emergency preparedness and response arrangements and promoting safety culture at all levels within a license holder (article 3(2)(b) of the Law).

The national legislative, regulatory and organisational framework for the nuclear and radiological safety provides, inter alia, for:

- (a) the establishment of the regulatory authority and the definition of its powers, role and responsibilities;
- (b) the establishment of a system on nuclear and radiological safety and radiation protection and a system of regulatory control of nuclear and radiological safety performed by the regulatory authority;
- (c) the justification and regulatory control over practices;
- (d) the definition of responsibilities and requirements in regulatory control;
- (e) the allocation of responsibilities and coordination between relevant state bodies, e.g. in emergencies;
- (f) national nuclear and radiological safety requirements, covering all stages of the lifecycle of facilities;
- (g) the placement of the prime responsibility for safety to the license holders or the employers;
- (h) a system of notification and authorisation (registration or licensing) and prohibition of operation of facilities without an authorisation;
- (i) a system for inspection and the appointment and the powers of the Chief Inspector and Inspectors;
- (j) effective and proportionate enforcement actions, including, where appropriate, corrective action or suspension of operation and modification or revocation of a license,
- (k) appeals against regulatory decisions;
- (l) offences and penalties;
- (m) the establishment of a Technical Licensing Committee (TLC) (advisory to RICS/DLI on authorisation-granting issues);
- (n) the establishment of the Council of Radiation Protection and Nuclear Safety (advisory to the MLWSI on nuclear safety and radiation protection policy and strategy issues);
- (o) international cooperation; and
- (p) the power of the Council of Ministers to issue Regulations under the Law.

Also, the Law commensurate with the magnitude and likelihood of exposures resulting from the practice, and commensurate with the impact that regulatory control may have in reducing such exposures or improving nuclear or radiological safety.

Moreover, the Law strengthens the independence of the regulatory authority, by requiring that the regulatory authority shall be provided with the appropriate means and competences to properly carry out the responsibilities assigned to it. In particular, the regulatory authority shall have sufficient legal powers, staffing and financial resources for the proper discharge of its assigned responsibilities. The Law also provides for periodic self-assessments and reporting of the national framework and regulatory authority through inviting, at least every ten years, international peer reviews. The Law, finally, includes provisions on transparency on nuclear and radiological safety issues, by making provision on the information to be provided to the general public and the workers. It also includes requirements on public participation in the decision-making process related to the licensing of nuclear installations and other facilities.

The legislative framework ensures that the prime responsibility for safety is placed on the license holders conducting practices with ionising radiation and being granted the relevant authorisations, and that the likelihood of a loss of control of radioactive material is minimised, through various provisions on the regulatory control and the responsibilities of registrants and license holders. The legislation also defines that any measures taken shall be transparent as concerns the rationale behind their implementation and take into consideration public consultation and the concerns of the interested parties, where applicable, and it is consistent with the national law on the protection of the confidentiality of any information received in confidence.

## ***1.2 Regulatory framework***

### ***1.2.1 General information***

The administration of the legislation on nuclear and radiological safety and security and radiation protection is assigned to a single regulatory authority, i.e. the MLWSI, as defined under the Law, acting through RICS/DLI.

The regulatory authority ensures the establishment and maintenance of a national legal, regulatory and organisational framework for all aspects within the scope of the Law, including the framework for the safety of facilities, installations, activities and radiation sources and the protection against ionising radiation and its improvement, where appropriate, taking into account operating experience, insights gained from safety analyses of operating installations, development of technology and results of safety research, when available and relevant. In particular, it ensures: (a) the safety principles for protecting people – individually and collectively – society and the environment from radiation risks, both at present and in the future; (b) acquiring and maintaining the necessary competence nationally for ensuring safety; (c) the types of facilities and activities included within the scope of the framework for safety; (d) authorisation for the operation of facilities and for the conduct of activities; (e) review and assessment of facilities and activities; (f) inspection of facilities and activities and the enforcement of regulations; (g) preparedness and response to a nuclear or radiological emergency; (h) the authority and responsibility for promulgating (or preparing for the enactment of laws and regulations and preparing guidance for their implementation; and (i) assigning legal responsibility for safety to the persons or organisations responsible for the facilities and activities.

Practices, sources and installations falling within the scope of the Law are subject to regulatory control for the purposes of radiation protection and radiological or nuclear safety and security, by way of notification, authorisation and appropriate inspections, commensurate with the magnitude and likelihood of exposures resulting from the practice, and commensurate with the impact that regulatory control may have in reducing such exposures or improving radiological or nuclear safety and security of installations and radiation sources (article 12 of the Law).

The regulatory authority has established in 2019 a national policy and strategy for nuclear and radiological safety, the implementation of which is subject to a graded approach, in accordance with national circumstances and with the radiation risks associated with facilities and activities.

More information on the applied regulatory framework and the associated organisational framework built to support the regulatory authority in exercising more effectively and efficiently its functions and responsibilities is provided under Section 2 of the report.

The national legislative, regulatory and administrative framework is maintained and improved accordingly, where necessary, taking into account operating experience, insights gained from safety analyses of operating facilities involving the use of ionising radiation, any developments of technology and results of safety research and international experience and good practice.

### ***1.2.2 Notification and authorisation***

The Law requires practices to be subject to regulatory control for the purpose of nuclear safety and security and radiation protection by way of notification and authorisation (registration or licensing), commensurate with the magnitude and likelihood of exposures resulting from the practice, and commensurate with the impact that regulatory control may have in reducing such exposures or improving nuclear or radiological safety (graded approach). Articles 14 and 15 of the Law, as well as the Notification of the Chief Inspector

R.A.A. 153/2019, define in detail which practices require authorisation through registration or licensing. Article 13 of the Law and the Notification R.A.A. 153/2019 also define which practices are exempted from notification and therefore from regulatory control.

The notification shall be made prior to the practice commencing and the regulatory authority has specified the information to be provided in conjunction with the notification. Notified practices which are not exempted from authorisation are subject to regulatory control through registration or licensing. Where an application for an authorisation is submitted, no separate notification is needed.

Practices such as:

- (a) the operation of radiation generators or accelerators or radioactive sources for medical exposures or for non-medical imaging purposes;
- (b) the operation of radiation generators or accelerators, except electron microscopes, or radioactive sources for purposes not covered by point (a),

are subject to either registration or licensing. Moreover, practices such as the disposal, recycling or reuse of radioactive materials arising from any authorised practice are subject to authorisation.

The Law requires licensing for the following practices:

- (a) the deliberate administration of radioactive substances to persons and, in so far as the radiation protection of human beings is concerned, animals for the purpose of medical or veterinary diagnosis, treatment or research;
- (b) the operation and decommissioning of any nuclear installation and the exploitation and closure of uranium mines;
- (c) the deliberate addition of radioactive substances in the production or manufacture of consumer products or other products, including medicinal products, and the import of such products;
- (d) any practice involving a high-activity sealed source;
- (e) the operation, decommissioning and closure of any facility / installation for the long-term storage or disposal of radioactive waste, including facilities managing radioactive waste for this purpose;
- (f) practices discharging significant amounts of radioactive material with airborne or liquid effluent into the environment.

An applicant requesting authorisation is required to demonstrate that adequate levels of nuclear or radiological safety, security and radiation protection are ensured in its facility / installation. The extent and the details in the documentation submitted through the application for an authorisation is commensurate with the size and nature of the risk associated with the facility / installation and its characteristics. The Notification of the Chief Inspector R.A.A. 153/2019, together with an approved self-guiding application form, defines in detail the requirements for practices, procedures and requirements of regulatory control relating to the notification or the granting of authorisation through registration or licensing.

Examples of information to be provided in an application for authorisation are:

- (a) responsibilities and organisational arrangements for protection, safety and security;
- (b) staff competences, including information, education and training;
- (c) design features of the facility / installation and of radiation sources;
- (d) anticipated occupational and public exposures in normal operation;
- (e) safety assessment of the activities and the facility / installation in order to:
  - (i) identify ways in which potential exposures or accidental and unintended medical exposures could occur;
  - (ii) estimate, to the extent practicable, the probabilities and magnitude of potential exposures;

- (iii) assess the quality and extent of protection and safety provisions, including engineering features, as well as administrative procedures;
- (iv) define the operational limits and conditions of operation;
- (f) emergency procedures;
- (g) maintenance, testing, inspection and servicing so as to ensure that the radiation source and the facility / installation continue to meet the design requirements, operational limits and conditions of operation throughout their lifetime;
- (h) management of radioactive waste and arrangements for the disposal of such waste, in accordance with applicable regulatory requirements;
- (i) management of disused radiation sources;
- (j) quality assurance; and
- (k) other security and physical protection issues, as applicable.

For registration, the above information is requested following a graded approach.

Licenses are granted on conditions. The conditions are specified in accordance with the type and the extend of practice and refer, inter alia, to:

- (a) the obligations of the license holders or the employers against the Law;
- (b) education, training, retraining and provision of information requirements;
- (c) design and performance criteria and requirements for the maintenance of radiation sources, appliances, equipment and other systems;
- (d) the assessment of risks associated with the facility / installation and the practice;
- (e) the control of radioactive substances, including the management in terms of safety and security of radiation sources which become disused;
- (f) the installation and maintenance of efficient systems for the detection, measurement and recording of the presence of ionising radiation of any type, emitted from any device or source in the premises, or by anything that is conveyed, carried away or discharged;
- (g) the design, location, construction, commissioning, operation, modification and maintenance of any premises or equipment containing radioactive substances or any radiation generator or any nuclear installation;
- (h) the preparedness and response measures in a nuclear or radiological emergency;
- (i) the handling, processing, transport, storage and disposal of radioactive materials or radiation generators;
- (j) the discharge of radioactive substances into the environment; and
- (k) the management and transmission of information, including the transmission of information to and from the regulatory authority, and keeping confidentiality of information in relation to safety and security.

A license granted under the Law is not transferable to any other license holder, and the regulatory authority, based on established criteria and procedures, may amend the terms, requirements and conditions or revoke or cancel the license.

The applications for licensing are reviewed and assessed by the regulatory authority. In the case that the regulatory authority considers that the information provided is not sufficient for decision-making, it may request from the applicant for additional information. With the exception of practices on the transport, import or export of radioactive sources or radiation generators that are subject to licensing (some types of practices fall under registration requirements), the conditions of the license are examined by the TLC, which is advisory to the regulatory authority. The TLC comprises of representatives and/or technical advisors from five Ministries (with competence in issues relevant to the procedure, such as environmental issues, transport, public health, medical equipment, commerce, energy, industry etc.), while representatives of district administrations, municipalities or other local authorities are invited to participate as observers. The modus operandi of the TLC is described in the Second Schedule, Part I, of the Law. The decision on granting or not a license lies exclusively with the regulatory authority.

As referred to elsewhere, the regulatory authority may issue general authorisation (registration) conditions for common practices with radiological equipment, e.g. dental or veterinary radiological practices.

The Notification of the Chief Inspector R.A.A. 153/2019, together with an approved self-guiding application form, defines the requirements and procedures for a renewal of an authorisation.

Articles 24 to 27 of the Law regulate issues related to the revocation, withdraw or cancellation of an authorisation. The regulatory authority has set out the scope and the criteria for the circumstances under which it is justified to amend the terms, requirements and conditions for authorisation through licensing and to withdraw or revoke such authorisation.

Article 29 defines that an applicant for a license or a license holder that is affected by a refusal for an authorisation or the revocation of an authorisation or modification in the terms, requirements or conditions of an authorisation or the withdrawal of the authorisation may appeal to the MLWSI. The MLWSI examines the reasons of the appeal and approves, cancels or amends the decision of RICS/DLI. The decision of the MLWSI (regulatory authority) is final and irrevocable.

### ***1.2.3 Review and assessment***

Based on article 33 of the Law, the regulatory authority reviews and assesses information related to safety, security and protection against ionising radiation, whether these are submitted by the applicant or obtained from other sources, in order to determine whether installations, practices and activities to be performed by the applicant comply with the regulatory requirements and the terms, requirements or conditions specified in the authorisation.

The review and assessment of information for an installation, practice or activity is proportional to the radiation hazards associated with the installation or practice or activity, following the graded approach.

The information relating to safety, security and protection against ionising radiation regarding to an applicant or a license holder, practice or activity taken into consideration for review and assessment is referred to in the Sixth Schedule of the Law and the Notification of the Chief Inspector R.A.A. 153/2019, following graded approach.

### ***1.2.4 Inspection***

The Law allocates the responsibility to the regulatory authority to establish a system of inspection to enforce the provisions of the Law and to initiate surveillance and corrective action where necessary. The regulatory authority has established an appropriate inspection programme, taking into account the potential magnitude and nature of the hazard associated with practices, a general assessment of radiation protection issues in the practices, and the state of compliance. The findings from each inspection are recorded and communicated to the license holder concerned. If the findings are related to an outside worker or workers, where appropriate, the findings are also communicated to the employer. The regulatory authority makes publicly available the outlines of the inspection programmes and the main findings from their implementation. Moreover, the regulatory authority is required to have mechanisms in place for the timely dissemination to relevant parties, including manufacturers and suppliers of radiation sources and, where appropriate, international organisations, of protection and safety information concerning significant lessons learned from inspections and from reported incidents and accidents and related findings.

In this framework, the MLWSI appoints a Chief Inspector and Inspectors, and may appoint any other persons deemed appropriate for the application of the Law as well. The Chief Inspector and the Inspectors

appointed under the Law are empowered to enter freely and without prior notice any premise, except domestic premises, for which they have reason to believe it is necessary to enter, at any reasonable time, or for which are of the opinion that a situation causes imminent risk of serious health detriment, serious degradation of the environment, or serious loss of use of property. They are also empowered to perform actions, such as, to carry out tests, investigations and surveys; to require the presentation of any register, notice, document etc. that is necessary for the purposes of any inspection, test, formal investigation or survey; to require any person to answer relevant questions or/and to facilitate and assist them; to make measurements, take photographs, make recordings and/or to take samples of any items or substances. Based on their findings and conclusions, the Chief Inspector and the Inspectors may proceed with a Verbal Notice or issue an Improvement Notice, a Prohibition Notice and/or a Fixed Penalty Notice. Depending on the nature of non-compliance, the case may be taken to the court.

### ***1.2.5 Enforcement and penalties***

The regulatory authority has been provided through the Law with the power to require from any individual or legal person to take action to remedy deficiencies and prevent their recurrence or to withdraw, where appropriate, authorisation when the results of a regulatory inspection or another regulatory assessment indicate that the exposure situation is not in compliance with the Law.

If the Chief Inspector or an Inspector is of the opinion that any license holder is contravening any provision of the Law or of any Regulations issued under the Law or the conditions of its authorisation, (s)he may serve an Improvement Notice, requiring that person to remedy the contravention, or, as the case may be, the issues causing it, within a stated period of time.

If the Chief Inspector or an Inspector is of the opinion that any premises or facility, plant, equipment, workplace, practice or other activity carried out in the premises, facility / installation, workplace or which is about to be carried on therein involves serious risk of health detriment, or serious loss of use of property or serious degradation of the quality of the environment arising from radiation, or as the case may be, it is expected to involve serious risk of health detriment, or serious loss of use of property, or serious degradation of the quality of the environment arising out of radiation, (s)he may serve on the license holder or the employer or its representatives or on the person who is responsible for the premises, installation equipment or place of work, or for the activities carried on therein, a Prohibition Notice, prohibiting forthwith the use of that premises, or installation, or equipment, or place of work, or the carrying out of practices or other activities, until the risk involved is lessened to the Inspector's satisfaction.

If the Chief Inspector or an Inspector is of the opinion that a license holder or an employer violates or has violated any provision of the Law or of the Regulations, Notifications, Codes of Practice or Standards issued under the Law or violates or has breached any condition or requirement contained in the authorisation, (s)he is empowered to issue a Fixed Penalty Notice for up to €500 per non-compliance, subject to up to €5,000 per Notice and up to a maximum of €20,000 penalty for the same license holder or installation within a period of two years.

The MLWSI may amend the conditions of a license granted to a license holder or employer at any time (s)he deems appropriate, by adding new or amending existing conditions or by revoking or cancelling the license. Whenever a license has been revoked or surrendered, RICS/DLI may give to the license holder such directions in writing as it may deem necessary, for preventing any harm from ionising radiation or from anything which is being done or has been done or was present at the premises in question.

Any license holder or employer having been posed obligations under the Law that fails to comply with any provision of the Law or of any Regulation, Notification, Code of Practice or Standards issued thereunder, is guilty of an offense and is liable to a fine of up to €80,000 or to imprisonment not exceeding four years or to both such penalties.

### ***1.3 Improvement and maintenance of the national framework***

RICS/DLI uses the findings from the review and assessment of information related to the safety and security of installations (safety and security analyses), sources and practices or activities and the protection of individuals from ionising radiation, as well as findings and lessons learned from operating experience and inspection and enforcement activities, to provide feedback, regarding the procedures governing regulatory control and decision-making and to further improve the national framework for nuclear and radiological safety, as appropriate. RICS/DLI also monitors the international developments in technology and safety and security research in order to integrate these advancements, when and as appropriate, to the national framework for nuclear and radiological safety and security.

RICS/DLI is further responsible for developing, adopting and revising national nuclear and radiological safety requirements and cooperated with other governmental departments, as appropriate, with competence in selected fields that may have a role in safety issues, such transport safety, waste and disused sealed source management safety etc.

## ***2. Article 5 - Competent regulatory authority***

### ***2.1 General information***

The MLWSI, acting through RICS/DLI, is the sole regulatory authority in Cyprus on radiation and nuclear safety and has the responsibility for the administration of relevant legislation and authorisation of all facilities, sources and practices involving exposure to ionising radiation (article 5 of the Law)]. Statements under this Section of the report are legally supported in article 6 of the Law.

RICS was established in 2002 within DLI, in the framework of the implementation of the Law, aiming at the protection of individuals, property and the environment against risks due to exposure to ionising radiation or dispersion of radioactive substances or radioactive contamination. The regulatory authority is functionally separate from any other authority or organisation concerned with the promotion or utilisation of ionising radiation in general, and effectively independent from undue influence in its regulatory decision making. The regulatory authority has been given sufficient authority, legal power and competent staff to discharge its responsibilities under the national legislative framework.

DLI is a Department of the Ministry of Labour, Welfare and Social Insurance, with competence in Occupational Health and Safety, Industrial Emissions Control, Air Quality Control, Control of Chemical Substances, Protection against Ionising Radiation and Nuclear Safety, and the Control of Machinery, Pressure Equipment, Equipment in Explosive Atmospheres and Personal Protective Equipment.

There is a clear allocation of decision-making and other responsibilities between the regulatory authority (the MLWSI) and the governing body (RICS/DLI) i.e. executing the powers of the Chief Inspector (the Director the DLI) and the Inspectors, who are in charge of the regulatory authority's performance and implementation of policies and decisions. Thus, a clear reference to hierarchy and relevant political or technical decisions is made through the organisational scheme of the regulatory authority, preventing the probability of occurrence of direct or indirect interest / involvement in facilities, installations or activities under regulatory control or other license holders and that staff remains focused on safety irrespective of their personal views.

All administrative decisions within the regulatory authority in implementing the existing legislation are taken by the Chief Inspector (the Director of DLI). However, for any high-level policy issues e.g. for the

adoption of the Government's policy for nuclear and radiological safety, radioactive waste management or capacity building through education and training, decisions are taken at MLWSI level.

The regulatory authority is able to make independent regulatory judgments and regulatory decisions, at all stages in the lifetime of facilities and the duration of activities until release from regulatory control, under operational states and in accidents, free from any undue influences that might compromise safety, such as pressures associated with changing political circumstances or economic conditions, or pressures from governmental departments or from other organisations. The regulatory authority is functionally separate from any other authority or organisation concerned with the promotion or utilisation of nuclear energy or ionising radiation, and does not seek or take instructions from any such authority or organisation when carrying out its regulatory tasks. Inspectors are independent in exercising their inspection powers and are supervised by the Director of DLI (Chief Inspector). Furthermore, the staff of the regulatory authority does not have any direct or indirect interest / involvement in facilities and activities or license holders beyond the interest for regulatory purposes. Applicable safety standards and requirements and regulatory procedures are integrated in the management system of the regulatory authority, which follows the ISO 9001:2015 standard.

The management system of the regulatory authority also integrates the issue of preventing and resolving conflicts of interest. Staff members of the regulatory authority are required to abstain from any regulatory procedure or decision, e.g. authorisation or expert service approvals, if there is direct or indirect involvement of either themselves or of their relatives up to fourth degree. Decisions pass through several stages of approval. Staff members of the regulatory authority are permanent governmental staff with relatively good salaries and the rotation of staff between users of ionising radiation and the regulatory authority in order to address the issue of potential conflict of interest does not occur in practice. The regulatory authority also takes measures to ensure avoiding conflicts of interest in the case of organisations that provide the regulatory authority with advice or services.

Sufficient financial resources are allocated through the annual budget of DLI to the regulatory authority for the proper and timely discharge of its assigned responsibilities as defined in the national framework. The budget is earmarked for the regulatory authority based on short-term and medium-term strategic planning and strategic goals, which are approved, by sequence, at MLWSI, Minister of Finance, Council of Ministers and House of Representatives (Parliament) level. All activities of the regulatory authority have to be justified, closely monitored and measured in terms of key performance indicators. Yearly budgets of the regulatory authority, as applies to the budgets of all governmental organisations, are approved by the Council of Ministers and voted for in the House of Representatives (the Parliament). The regulatory authority has the power to decide alone about the implementation of the regulatory programme, based on strategic goals, priorities and needs set. In case of unforeseen circumstances e.g. in emergency exposure situations, a mechanism is in place within DLI, MLWSI and the Ministry of Finance for the provision of additional funds.

The regulatory authority is able to give independent advice and provide reports to governmental departments and other bodies on issues relating to the safety of facilities and activities, including access to the highest levels of the Government. It is also capable of liaising directly with regulatory bodies of other States and with international organisations to promote cooperation and the exchange of regulatory related information and experience.

The number of qualified staff and the sufficiency of financial resources for the proper discharge of the assigned responsibilities is an on-going challenge, and there is always space for enhancing the capabilities of the regulatory authority with additional qualified and trained staff. RICS/DLI is currently staffed with four Labour Inspection Officers, with qualifications, experience and expertise in radiation protection and nuclear and radiological safety and security. Regulatory staff gets benefit of the learning need identification procedure run as part of the management system of DLI. Training needs are usually covered either locally, e.g. through training programmes offered by the Cyprus Public Administration Academy or abroad, e.g. through participation in various programmes organised by the IAEA, the European Commission, the Board

of Heads of European Radiological Protection Competent Authorities (HERCA), the High-level Group on Nuclear Safety and Waste Management (ENSREG), regulatory bodies of other countries etc. Three new posts have been approved by the Government in 2019, which are expected to be filled in the coming period. RICS/DLI staffing needs are based on a human resource plan prepared in 2010 by an independent external auditing authority. Any new staff recruitment procedure is governed by the general recruitment policy of the Government, as set by the Department of Public Administration and Personnel of the Ministry of Finance.

The regulatory authority may cooperate, where appropriate, with external technical support bodies or organisations and Consultants on issues within its competence to support its regulatory functions. The regulatory authority maintains at all stages its effective independence and ownership of all decisions made.

## ***2.2 Status and functions of the regulatory authority***

The regulatory authority ensures the establishment and maintenance of a national legal, regulatory and organisational framework for all aspects of the application of the Law, including the safety and security of facilities / installations, activities and radiation sources and the protection against ionising radiation, including in particular:

- (a) the safety principles for protecting people – individually and collectively – society and the environment from radiation risks, both at present and in the future;
- (b) the types of facilities / installations and activities that are included within the scope of the framework for safety;
- (c) the type of authorisation that is required for the operation of facilities / installations and for the conduct of activities, in accordance with a graded approach;
- (d) the rationale for the authorisation of new facilities / installations and activities, as well as the applicable decision-making process;
- (e) provision for the involvement of interested parties and for their input to decision making;
- (f) provision for assigning legal responsibility for safety to the persons or organisations responsible for the facilities and activities, and for ensuring the continuity of responsibility where activities are carried out by several persons or organisations successively;
- (g) the establishment of a regulatory authority;
- (h) provision for the review and assessment of facilities / installations and activities, in accordance with a graded approach;
- (i) the authority and responsibility of the regulatory authority for promulgating (or preparing for the enactment of) laws and regulations and preparing guidance for their implementation;
- (j) provision for the inspection of facilities / installations and activities, and for the enforcement of regulations, in accordance with a graded approach;
- (k) provision for appeals against decisions of the regulatory authority;
- (l) provision for preparedness and response to a nuclear or radiological emergency;
- (m) provision for an interface with nuclear security;
- (n) provision for an interface with the system of accounting for, and control of, nuclear material;
- (o) provision for acquiring and maintaining the necessary competence nationally for ensuring safety;
- (p) responsibilities and obligations in respect of financial provision for the management of radioactive waste and of spent fuel, and for decommissioning of facilities and termination of activities;
- (q) the criteria for release from regulatory control;
- (r) the specification of offences and the corresponding penalties; and
- (s) provision for controls on the import and export of nuclear material and radioactive material, as well as for their tracking within, and to the extent possible outside, national boundaries, such as tracking of the authorised export of radioactive sources.

RICS/DLI performs, inter alia, the following functions (article 9 of the Law):

- (a) recommends and defines safety and health standards for practices which may cause health detriment arising from exposure to ionising radiation or may cause harm to the environment or may give rise to loss of use of property due to dispersion of radioactive substances, or due to radioactive contamination;
- (b) requires the license holder to comply with and document such compliance with national requirements for ionising radiation, safety including nuclear safety, and security and with the terms, requirements and conditions of relevant authorisation;
- (c) reviews and assesses information related to the safety and protection of facilities and radiation sources and related practices and activities, and the protection of individuals, property and the environment against ionising radiation, to check compliance with regulatory requirements or conditions set out in the authorisation;
- (d) receives notifications and grants authorisations;
- (e) inspects, for the purposes of compliance with the legislation in force, any practices or facilities in which activities are carried out that may cause a health detriment arising from exposure to ionising radiation or may cause harm to the environment or may give rise to loss of use of property due to dispersion of radioactive substances, or due to radioactive contamination;
- (f) carries out substantive and proportionate enforcement actions, including, where appropriate, corrective actions or the cessation of operation of a facility / installation or the cessation of a practice and the amendment or revocation of an authorisation;
- (g) coordinates or ensures the existence of educational, scientific or other type of organisations for the purpose of providing of instructions for, or the education or training of apprenticeship or of other relevant services in respect of protection against risks from ionising radiation;
- (h) ensures the coordination of educational, scientific or other bodies responsible for providing education and training relevant to nuclear safety and radiation protection;
- (i) recognises the ability of experts and services provided for in the Law to act in accordance with the areas of their competence, as well as the qualifications and training of workers and other persons in safety and radiation protection issues;
- (j) keeps appropriate registers, including inventories of sources of ionising radiation, of premises, of practices and of the exposed workers and the doses received;
- (k) recommends the establishment of a national framework for nuclear safety and its improvement when appropriate, taking into account operating experience, insights gained from safety analyses of operating nuclear installations, development of technology and results of safety research, when available and relevant; and
- (l) monitors the levels of radioactivity in the air, soil, water, sea, foodstuff, feed, building materials and other products and goods, and ensures the application of appropriate measures, where appropriate.

The regulatory authority has established in 2019 a national policy and strategy for safety, the implementation of which is subject to a graded approach in accordance with national circumstances and with the radiation risks associated with facilities and activities. The national policy and strategy for safety expresses the Government's long-term commitment to safety and sets out the mechanisms for implementing the national policy, taking into account the country's international obligations and arrangements for international cooperation and assistance.

The Government has ensured through the regulatory authority that, where necessary, there is appropriate national coordination of and liaison between the various authorities concerned in areas such as:

- (a) safety of workers and the public;
- (b) protection of the environment;
- (c) applications of radiation in medicine, industry and research;
- (d) emergency preparedness and response;
- (e) management of radioactive waste

- (f) nuclear security;
- (g) accounting for, and control of, nuclear material;
- (h) safety in relation to water use and the consumption of food;
- (i) land use, planning and construction;
- (j) safety in the transport of dangerous goods, including nuclear and radioactive material; and
- (k) controls on the import and export of nuclear and radioactive material.

The regulatory authority, without compromising its effective independence, has made provision for technical services in relation to safety, such as personal dosimetry services, environmental monitoring and the calibration of equipment. These services include:

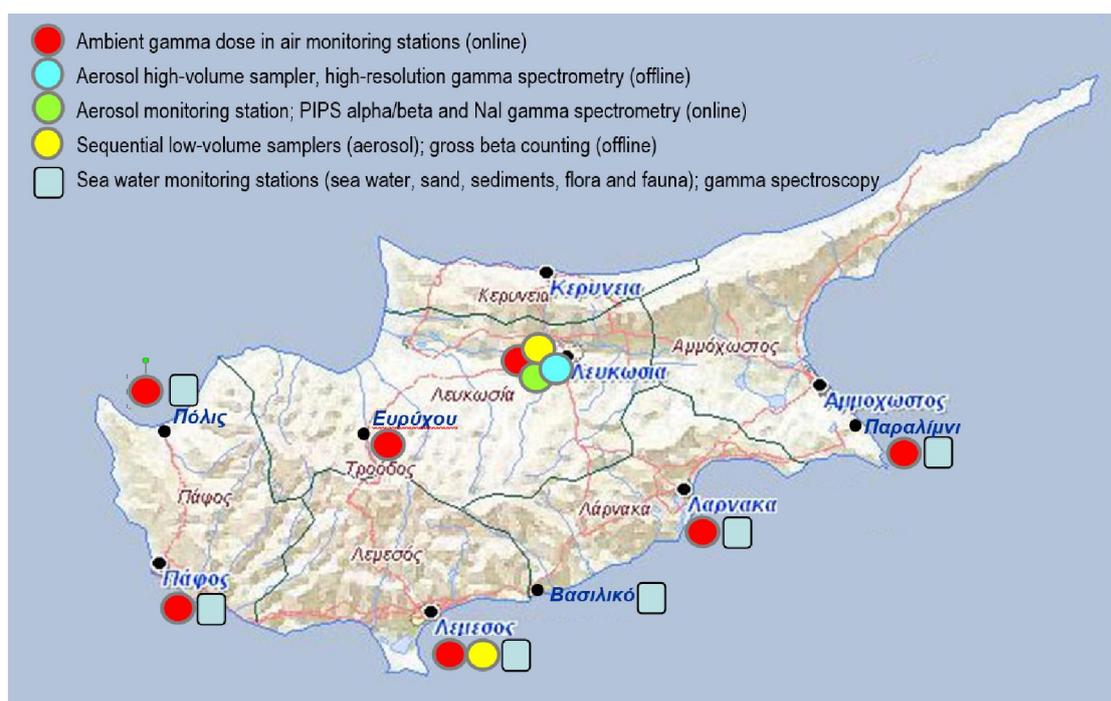
- (a) the Environmental and Food Radioactivity Laboratory of the State General Laboratory, established under the Ministry of Health, for laboratory environmental analysis and measurements;
- (b) the Secondary Standard Dosimetry Laboratory of the Nicosia General Hospital, Ministry of Health;
- (c) other laboratories for analytical spectroscopic measurements; and
- (d) personal dosimetry laboratories.

The regulatory authority is responsible to ensure that adequate infrastructural arrangements are established for the interface of safety with arrangements for nuclear security and with the country's system of accounting for, and control of, nuclear material. Specific responsibilities within the governmental and legal framework include:

- (a) an assessment of the configuration of facilities and activities for the optimisation of safety, with factors relating to nuclear security and to the system of accounting for, and control of, nuclear material being taken into account;
- (b) an oversight and enforcement to maintain arrangements for safety, nuclear security and the system of accounting for, and control of, nuclear material;
- (c) liaison with the law enforcement agencies, as appropriate; and
- (d) integration of emergency arrangements for safety related and nuclear security related incidents.

The regulatory authority has established an emergency preparedness and response system, including emergency arrangements and a national emergency preparedness and response action plan, to enable a timely and effective response in a nuclear or radiological emergency and to protect the public in a nuclear or radiological emergency declared as a consequence of an incident within or outside the territory and jurisdiction of the country. The Government has designated, through the national radiation emergency plan ELECTRA, response organisations that will have responsibilities and resources necessary to make preparations and arrangements for dealing with the consequences of incidents in facilities and activities that affect, or that might affect, the public and the environment. In the event of an emergency, the regulatory authority is tasked to act as coordinator of the national radiation emergency plan, advise the Government and response organisations, and provide expert services.

A comprehensive environmental radioactivity monitoring network acts as both the early warning system in the country and for routine environmental monitoring (see map below). The network has been enhanced through the last years with the addition of an online aerosol spectroscopic monitoring station, located at Nicosia, and a portable surface contamination monitoring station with interconnection to the network capability. The monitoring network has been further upgraded by means of power autonomy by establishing solar panels in all fixed ambient gamma dose rate monitoring stations and back-up communication / transmission of data channels.



The regulatory authority makes continuous efforts to strengthen its capacity by means of procurement and appropriate maintenance of radiation detection and measurement equipment, relevant to its broad functions and responsibilities.

### 2.3 National and international coordination, participation and cooperation

The regulatory authority is the sole authority in Cyprus for nuclear and radiological safety and security and radiation protection. Transport of radiation sources is also conducted according to the regulations on the transport of dangerous goods (by road, sea or air) and the international radiation safety regulations, in cooperation with the relevant Departments of the Ministry of Transport, Communications and Works and the Shipping Deputy Ministry. As regards security of radioactive sources, other stakeholders in the country have competence as well, such as the Ministry of Justice and Public Order (Police, Fire Brigade, National CBRN-E Coordination Body); the Ministry of Foreign Affairs; the Ministry of Finance (Department of Customs); the Ministry of Energy, Commerce and Industry (exports control and licensing); the Ministry of Transport, Communications and Works (Department of Road Transport, Department of Civil Aviation, Department of Postal Services); the Shipping Deputy Ministry; the Cyprus Ports Authority; and the Cyprus Intelligence Service.

As discussed earlier, the regulatory authority is supported by technical services for personal dosimetry, environmental monitoring and measurement and the calibration of equipment.

Cyprus has ratified, is signatory to or participates in a number of International Conventions, Protocols, Agreements and other Instruments in the area of safety and security and applies the relevant international standards for transport of radioactive materials, as reported under Article 4 of the Directive.

In order to ensure that information concerning any loss of control over radioactive sources, or any incidents, with potential transboundary effects involving radioactive sources, is provided promptly to potentially affected States, Cyprus participates via its regulatory authority in the IAEA's Incident and Trafficking Database (ITDB) and the Unified System for Information Exchange in Incidents and Emergencies (USIE) platforms.

Cyprus has signed a Memorandum of Understanding with the Joint Research Center of the European Commission on the participation of Cyprus at the European Radiological Data Exchange Platform (EURDEP). Via its participation to EURDEP, Cyprus provides radiological data to the International Radiation Monitoring Information System (IRMIS) database, as well. Cyprus participates in the relevant European Community Urgent Radiological Information Exchange (ECURIE) platform of the European Commission and to the relevant ECURIE and a number of IAEA's ConvEx exercises. It's worth noting that Cyprus took part for the first time in 2017 in a large-scale ConvEx-3 exercise held by IAEA. Cyprus has updated the complete version of its national profile and the emergency preparedness and response arrangements under the IAEA's Emergency Preparedness and Response Information Management System (EPRIMS) in June 2019 and completed a relevant HERCA country fact sheet. Moreover, Cyprus has sent contribution to the European Atlas of Natural Radiation, which displays the levels of natural radioactivity originating from various radiation sources.

Cyprus participates in the meetings and other activities of various expert groups under the auspices of the European Commission, such as the ENSREG and the Euratom Treaty Articles 31 and 37 Groups of Experts. In the Europe region, Cyprus participates since its establishment in HERCA, and in the Western European Nuclear Regulators Association (WENRA) (as observer).

Despite of its small size, Cyprus makes efforts to involve relevant staff from the regulatory authority and other institutions in international arrangements promoting safety and international cooperation and assistance, as well as providing feedback on lessons learned from operating and regulatory experience in other States, such as international peer reviews.

Cyprus has a bilateral agreement with the Greek Atomic Energy Commission, for cooperation on radiation protection and nuclear and radiological safety and security issues and for exchange of information on relevant issues. As a result, frequent education and training events are organised and knowledge, experiences and expertise are shared between the two authorities.

The regulatory authority has the responsibility to ensure that information in relation to safety, security or radiation protection is made available to license holders, workers, and members of the public. This obligation includes ensuring that the regulatory authority provides information within its fields of competence. Information is made available in accordance with national legislation and international obligations, provided that this does not jeopardise other interests such as, inter alia, security, recognised in national legislation or international obligations. Subsequently, the regulatory authority is responsible to protect the confidentiality of any information that it receives in confidence from another State or through participation in an activity carried out in accordance with an international instrument. Information is promptly shared and cooperation established with other States and relevant international organisations regarding safety, security or radiation protection, without prejudice to relevant confidentiality requirements and relevant national legislation.

The regulatory authority has established procedures to identify lessons learned from operating experience and regulatory experience, and disseminates information on the practical implementation of measures derived from this experience by the license holders, the regulatory authority itself and, where relevant, by other relevant authorities. Relevant information is reported to international knowledge and reporting networks, as well.

## ***2.4 Openness, transparency and public consultation and communication***

The regulatory authority is required by law to ensure that information in relation to the justification of classes or types of practices, the regulation of radiation sources and of safety and radiation protection is made available to license holders, workers, and members of the public, as appropriate. This obligation includes ensuring that the regulatory authority provides information within its fields of competence.

Information is made available in accordance with national legislation and international obligations, provided that this does not jeopardise other interests such as, inter alia, security, as recognised in the national legislation or international obligations.

Originating from the Directive 2014/87/Euratom, the national legislation provides that all necessary information in relation to the nuclear safety of nuclear installations and its regulation is made available to workers and the general public, with specific consideration to local authorities, population and stakeholders in the vicinity of a nuclear installation. That obligation includes ensuring that the regulatory authority and the license holders, within their fields of responsibility, provide in the framework of their communication policy: (a) information on normal operating conditions of nuclear installations to workers and the general public; and (b) prompt information in case of incidents and accidents to workers and the general public and to the regulatory authorities of other States in the vicinity of a nuclear installation. The regulatory authority is required to engage, as appropriate, in cooperation activities on the nuclear safety of nuclear installations with regulatory authorities of other States in the vicinity of a nuclear installation, inter alia, via the exchange and/or sharing of information. The regulatory authority ensures that the general public is given the appropriate opportunities to participate effectively in the decision-making process relating to the licensing of nuclear installations, and regarding spent fuel and radioactive waste management in accordance with relevant legislation and international instruments. In practice, the regulatory authority implements this obligation applying a graded approach in accordance with national conditions and the radiation risks associated with facilities and activities in the country.

The regulatory authority consults, in assessing the conditions of licenses to be granted, by the TLC. The TLC comprises representatives and/or technical advisors from five Ministries (with competence in environmental issues, transport, public health, medical equipment, commerce, energy, industry etc.), while representatives of district administrations, municipalities or other local authorities are invited to participate as observers and may provide their opinion. The public is represented indirectly through the participation of the municipalities or other local authorities.

The Law requires that any license granted by the regulatory authority, as well as the conditions accompanying the license, be displayed in the premises of the license holder in a prominent position. The public has in that way direct access to the safety conditions placed on the license holder.

All new pieces of legislation are accompanied by an impact assessment, which identifies any social, environmental or economic impact to Small and Medium-size Enterprises and the society in general, as well as to any special groups of the population and the general public. The impact assessment is part of the accompanying documents of draft pieces of legislation that undergo public consultation. In order to inform the public and provide information quickly and effectively, and depending on the nature of the document put under consultation, public consultation is conducted, mainly by means of publications or announcements and citations to where the draft documents are available, in the official website and the social media accounts maintained by the regulatory authority, the official gazette of the Republic, in the official website of the Press and Information Office (the Republic's official information gateway), in daily press, television and radio spots in channels of national and/or local coverage, electronic mailing lists, and providing copies at the offices of the interested local authorities. Special attention is given to informing the relevant interested parties in the country, such as the associations of the employers, the employees, the industry, technical and scientific organisations, academic institutions, other governmental agencies etc.

The above information may concern a forthcoming decision, the nature of possible decisions or, where such decision has already been made, the decision; the place and time in which the information associated with the impending decision are available to the public; and that any member of the public may submit to the regulatory authority views or raise an issue within 35 days from the date of publication of the notice. In addition, the regulatory authority, informs the public of the views received or issues raised by any person. Before taking a decision, the regulatory authority shall take in due account the views received or issues raised. The way in which the regulatory authority has taken into account the received views or raised issues

shall be included in a summary statement, which is maintained in an appropriate record, as provided for in the legislation.

A special Council, called the Council of Nuclear Safety and Radiation Protection, is appointed by and advises the MLWSI in the formulation of the national safety policy on ionising radiation issues, including the applications of nuclear techniques, nuclear or radiological safety and health and safety issues against the dangers of ionising radiation, and, as applicable, for all issues relating to nuclear energy, including issues of potential exposure to radiation from hazards from sources outside Cyprus. The Council comprises representatives of Ministries, professional associations, the associations of employers and the employees, technical and scientific organisations and academia.

An evidence-based and documented decision-making process is required by law to be applied with regard to all stages of the lifetime of a facility / installation, including the management of radioactive waste. The documentation of the decision-making process as it relates to safety should be commensurate with the levels of risk (graded approach) and should provide a basis for decisions related to the management of spent fuel and radioactive waste. This should enable the identification of areas of uncertainty on which attention needs to be focused in an assessment of safety. Safety decisions should be based on the findings of an assessment of safety and information on the robustness and reliability of that assessment and the assumptions made therein.

Decision-making shall be based on proven scientific information and recommendations of the regulatory authority (i.e. the MLWSI). Safety issues shall take into account the interests and concerns of all interested and affected parties, when decisions are being made. The regulatory authority shall ensure that the public is given the necessary opportunities to participate effectively in the decision-making process regarding waste management. Where there is uncertainty about the safety of an activity, a conservative approach shall be adopted.

Moreover, Cyprus is a party to the UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, known as the “Aarhus Convention”. This Convention establishes a number of rights of the public, individuals and their associations, with regard to the environment, such as the right of everyone to receive environmental information that is held by public authorities (“access to environmental information”), the right to participate in environmental decision-making (“public participation in environmental decision-making”), and the right to review procedures to challenge public decisions that have been made without respecting the two aforementioned rights or environmental law in general (“access to justice”). Cyprus is also party to the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention and its amendment), its associated Protocol (UNECE Kiev Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context), as well. The MLWSI has competence for all installations referred to in the above Conventions where ionising radiation is used.

Being an integral part of the Ministry of Labour, Welfare and Social Insurance, the regulatory authority has traditionally good relations with the employee associations, the employer associations etc. The regulatory authority’s cooperation and consultation with other competent authorities in the country, relevant stakeholders, including social partners, employer representatives, professional associations etc., for the coordinated implementation of legislation, has been identified as one of the areas of good performance under the IAEA’s 7<sup>th</sup> CNS Review Meeting.

## ***2.5 Knowledge management***

The regulatory authority has established a system to determine the competence of its employees. The regulatory authority has established a training committee, consisting of representatives from all sections of the organisation that assess the competences and training needs of employees, independently of the

management of the organisation, and recommends to the senior management the training and resources required to improve performance. All employees are required to annually complete a competence assessment questionnaire that is submitted to the training committee, which conducts interviews of employees indicating deficiencies in specified areas, as well as their supervisors / managers, assesses the training needs, compiles a report of and a budget to be approved by the director. An annual budget is allocated for training and the regulatory authority's management ensures the provision of training through local institutions (e.g. the Cyprus Public Administration Academy or universities), consultants, radiation protection experts, other internal knowledge management initiatives (e.g. train-the-trainers workshops), the IAEA, the EU, other European or international organisations (e.g. HERCA) etc. As such, the regulatory authority has been able to ensure that its employees continuously improve their competence in line with the changing standards, and technology.

The regulatory authority's system for establishing and addressing the competence and training needs among its staff aimed at improving their contribution to achievement of organisational goals has been recognised as an area of good performance under the IAEA's 7th CNS Review Meeting.

### 3. Article 6 – Licence holders

**Note:** *The new legislation introduces the definition of “undertaking”, in alignment with the definition used in the European Directive 2013/59/Euratom, meaning a natural or legal person who has legal responsibility under national law for carrying out a practice, or for a radiation source (including cases where the owner or holder of a radiation source does not conduct related human activities). In this respect, not having an authorisation would not exonerate the person or organisation responsible for the facility or activity from the responsibility for safety, in accordance with IAEA standards. Although not exactly corresponding, the term “license holder” is used throughout this report instead of “undertaking” for compliance with the terminology of the Directive.*

Without prejudice of the provisions of article 10, paragraph 1a, of the Directive, the provisions of article 6 of the Directive apply respectively to Cyprus.

The national legislative framework assigns the prime responsibility for safety throughout the lifetime of a facility / installation and the duration of an activity to the person or organisation responsible for the facility / installation or the activity, and confers on the regulatory authority the authority to require such persons or organisations to comply with stipulated regulatory requirements, as well as to demonstrate such compliance (article 44 of the Law). The regulatory authority stipulates that compliance with regulations and requirements established or adopted by the regulatory authority does not relieve the person or organisation responsible for a facility / installation or an activity of its prime responsibility for safety. This responsibility for safety cannot be delegated; however, it may be transferred to a different license holder only when there has been a declared change of general responsibility for a facility / installation or activity that has been approved in advance by the regulatory authority. In addition, responsibility for safety may extend to other groups associated with the license holder, such as designers, suppliers, manufacturers and constructors, employers, contractors, and consignors and carriers, in so far as their activities or products may be of significance for safety, however the license holder retains the overall prime responsibility for safety, the responsibility for the selection of appropriate such contractors, human resources with appropriate qualifications and competences to fulfil their obligations, proper education and training of their personnel, etc. Moreover, license holders may seek advice for safety, security and radiation protection issues from radiation protection experts (“qualified experts”) in the field of their competence, recognised by the regulatory authority. In no case may this extension of responsibility or receiving advice or other services from external technical support organisations relieve the license holder of the prime responsibility for safety.

A license holder is responsible for carrying out its activities ensuring primarily the safety and security of facilities and activities, according to the national legislation and the conditions of the license, meeting the safety standards and applying the basic principles of radiation protection, and taking all appropriate measures to protect workers, members of the public, property and the environment from risks arising from the use of ionising radiation.

As part of the licensing process of a facility / installation or activity, the safety demonstration shall cover the development and operation of an activity and the site evaluation, design, construction, commissioning, operation, shutdown and decommissioning, as applicable. The extent of safety demonstration has to be commensurate with the complexity of the operation and the magnitude of the hazards associated with the radioactive waste, and the facility / installation or activity. The licensing process contributes to safety in the facility / installation or activity during normal operating conditions, anticipated operational occurrences and design basis accidents. Measures need to be in place to prevent accidents and mitigate the consequences of accidents, including verification of physical barriers and the license holder's administrative protection procedures that would have to fail before workers and the general public would be significantly affected by ionising radiation. The Law and the Notification of the Chief Inspector R.A.A. 153/2019 allow adequate flexibility based on a graded approach for a license holder to demonstrate compliance with existing safety and security requirements, according to the potential magnitude and nature of the hazard relevant for the installation and its site.

The national legislation on radiation protection and nuclear and radiological safety and security also provides that a license holder shall take all necessary technical and administrative measures, in relation to the license granted to it, for ensuring safety and health of any individual and for protecting the use of, or property of any person and the environment and shall establish and implement integrated management systems, including quality assurance, which give due priority to safety and are regularly verified by the regulatory authority. The regulatory authority has prepared a code of practice guiding license holders in applying appropriate management systems. In order to achieve the objective of establishing and implementing appropriate administrative and management systems which give due priority to nuclear and radiological safety and security, a license holder ensures, inter alia, that: (a) minimises the impact of extreme natural and unintended anthropogenic hazards; (b) prevents abnormal operation and failures; (c) it monitors for abnormal operation and detects failures; (d) the resulting accidents occurring within the design base are under control; (e) serious circumstances are under control, including the prevention, development of accidents and mitigation of the effects of serious accidents; and (f) organisational infrastructures for on-site emergency preparedness and response have been set up, with clear allocation of responsibilities and coordination between the license holder and the competent authority and the emergency response agencies or organisations, taking into account all phases of an emergency.

Article 45(4) of the Law requires the license holders to perform a comprehensive and systematic safety assessment to demonstrate that hazards posed by their installations are adequately controlled. The safety assessment shall be periodically reviewed, assessed and verified. If the safety assessment indicates that there is a risk to the health of employees or other persons, to facilities, radiation sources or to property or the environment from an accident that may occur, the license holder shall take all appropriate measures for the avoidance of such an accident and for limiting and mitigating the consequences in the event of such an accident. The safety assessment and the monitoring of the effectiveness of the safety and security measures implemented by the license holder in relation to facilities and radiation sources shall be carried out at various stages, including the siting decision, design, construction, building, beginning of operation, operation, maintenance, shutdown and dismantling or demolition of an installation under the responsibility of the license holder, as appropriate, for the purpose of: (a) identifying the way in which persons are or are likely to be exposed to ionising radiation; (b) identifying ways in which safety and security of facilities and radiation sources are affected or are likely to be affected; (c) identifying the way in which loss of property or the effect or probability of adversely affecting the property or the environment occurs or is likely to occur; (d) determining the level of any normal exposure; (e) determining the probability of any exposure

occurring and the magnitude of any potential exposure; and (f) assessing the quality and effectiveness of safety and security measures and the safe operation of sources and related electrical equipment.

Articles 45(5) and (6) of the Law provide that, whenever a safety assessment indicates that a radiation emergency situation may be created, the license holder is required to prepare an appropriate emergency response plan in writing and put into place appropriate emergency preparedness and response arrangements, to limit any person's exposure to radiation and the protection of the environment. The emergency response plans are required to be: (a) periodically reviewed and revised, when necessary; (b) periodically tested at appropriate intervals, taking into account any changes in the practices performed, the knowledge and experience available and the risk assessment on which their preparation was based; and (c) submitted for evaluation to RICS/DLI. The emergency arrangements shall include, in particular: (a) procedures, guidelines and arrangements to deal with accidents that can occur in all operating, shut down and transitional situations, ensuring consistency and continuity between all these processes and arrangements, and ensuring that they are tested, reviewed and updated; (b) sufficient in number and trained staff, adequate and sufficient equipment and other necessary resources; (c) an organisational structure with a clear allocation of responsibilities, as well as coordination between the license holder itself and the emergency response agencies or organisations; (d) clear assignment of responsibility for the immediate notification of the emergency situation to RICS/DLI and to the emergency response agencies or organisations; and (e) arrangements for receiving external assistance.

The license holder or the employer shall take appropriate measures to foster, promote and maintain an effective safety and protection culture at all levels of the staff and the management itself, as a key factor in achieving a high level of safety and protection, which is constantly improving. These measures shall include in particular: (a) the commitment at all levels of personnel and the management to safety and its continuous improvement; (b) improving the ability of staff at all levels to assess whether principles and practices are provided for the continuous improvement of safety; (c) the ability of staff to report in a timely manner on safety issues to the management; (d) lessons learned from the operating experience of the facility / installation; and (e) systematically reporting any deviation from normal operating conditions and addressing corrective actions related to the management of accidents that are likely to affect safety.

A license holder is required to provide and maintains sufficient financial resources, including alternative means of demonstrating its financial competence, human resources, with appropriate qualifications and responsibilities, and technical means to fulfill his obligations with regard to the radiological safety and security of an installation or the nuclear safety of a nuclear installation or the protection of radiation sources as defined by this Law.

The license holder may appoint other persons to carry out actions or to carry out tasks related to its obligations as a license holder, but the license holder shall retain the responsibility for such actions, tasks or omissions itself and has the overall responsibility for the radiation protection and nuclear and radiological safety and security. A license holder shall notify RICS/DLI in writing of its intention to introduce modifications to any practice or source for which it is licensed, and whenever the modifications will have significant implications on safety and health issues, on the protection of use of property of any person and on the protection of the environment, it shall not carry out any modification unless it has a new license for this purpose.

The compliance of the license holders with the national legislation, the conditions of the license and any other applicable safety standards is assessed and verified by the regulatory authority through review and assessment, authorisation and inspections, both announced and unannounced.

#### **4. Article 7 – Expertise and skills in nuclear safety**

Article 47 of the Law provides that all parties shall make arrangements for the education and training of their staff having responsibilities related to the safety of facilities / installations and activities so as to obtain, maintain and to further develop expertise and skills in safety, so that they understand their responsibilities and perform their duties with good judgement and according to the specified procedures, and on-site emergency preparedness.

The regulatory authority has the responsibility for the establishment of a legislative and administrative framework ensuring the provision of appropriate education, training and information in radiation protection and nuclear and radiological safety and security to all individuals whose tasks require specific competences in these matters. The Notification of the Chief Inspector R.A.A. 327/2019 provides analytical education and training standards for all the above parties, including the regulatory authority. The education and training arrangements of the regulatory authority are integrated in its management system.

Any person providing education or training programs in nuclear and radiation safety and security and radiation protection issues and issuing certificates of attendance for their programmes is required to clearly specify in these certificates the level and modules covered, the duration of education and/or training in each module, the date of the education and/or training event and the name of the education provider.

Any person providing the education and/or training programmes and issuing attendance certificates for such programmes, may carry out the education and/or training activities in the specific subject areas only if this person has sufficient and appropriate knowledge and experience in these matters recognised as such by RICS/DLI.

The framework described above is required to ensure the provision of training and information is repeated at appropriate intervals and documented.

The regulatory authority ensures that arrangements are made for the establishment of education, training and retraining to allow the recognition of radiation protection experts and medical physics experts, as well as occupational health services and dosimetry services, in relation to the type of practice.

The license holders are required to ensure that only persons entitled or described by their knowledge or their qualifications in the application and the authorisation, where required by RICS/DLI, have been assigned with important tasks related to the safety and health protection of any person, the protection of property in use and the protection of the environment, and that only workers who have been assigned such duties which include the operation or use of sources and which may significantly affect the safety and health of persons or the protection of property or the protection of environmental protection shall perform such tasks. The license holder or the employer is required to take into account the job-related qualifications, skills, education and training of that worker when assigning tasks to his employee. When it comes to outsourcing a job to a worker, the license holder ensures that this person has sufficient knowledge and experience of the work to be performed so that he can perform this task without risk to himself or to other persons.

Regulations 13 to 16 of the Notification of the Chief Inspector no. R.A.A 374/2018 include provisions on education and training of exposed workers, including education and training arrangements in emergency preparedness and response. Such provisions on education and training in emergency preparedness and response are also included in the National System on Emergency Exposure Situations and in the National Plan ELECTRA on Preparedness and Response in Case of a Nuclear or Radiological Emergency.

The license holders are also required to ensure that contractors and subcontractors under their responsibility and whose activities might affect the nuclear safety of a nuclear installation have the necessary human resources with appropriate qualifications and competences to fulfil their obligations.

## **5. Article 8: Transparency**

Information on transparency and effective public participation in the decision making is provided under Article 5 of the Directive.

## **6. Article 8a: Nuclear safety objective for nuclear installations**

## **7. Article 8b: Implementation of the nuclear safety objective for nuclear installations**

## **8. Article 8c: Initial assessment and periodic safety reviews**

## **9. Article 8d: On-site emergency preparedness and response**

Pursuant to the provisions of article 10, paragraph 1a, of the Directive, information relevant to the provisions of articles 8c and 8d of the Directive are provided under Article 14 “Assessment and verification of safety” and Article 16. “Emergency preparedness” of the Cyprus report submitted in the framework of the 8<sup>th</sup> Review Meeting of the Convention on Nuclear Safety.

## **10. Article 8e: Peer reviews**

An IAEA full-scope Integrated Regulatory Review Service (IRRS) peer review mission of the regulatory authority and of the radiation protection and nuclear and radiological safety system in Cyprus has been conducted in Cyprus in the period 13-22 February 2017. The peer review was carried out in accordance with the provisions of the national legislation, the IAEA’s safety standards and the European Directive 2009/71/Euratom establishing a Community framework on the nuclear safety of nuclear installations, as amended by Directive 2014/87/Euratom.

The IRRS team recognised that Cyprus has a dedicated regulatory authority for the protection of people and the environment, and for continuous improvement of safety. However, the team identified issues warranting attention or needing further improvement:

- (a) review of the legal framework to ensure compliance with the requirements of GSR Part 1 (Rev. 1);
- (b) establishment of a national policy and strategy for safety;
- (c) provision to RICS/DLI of adequate human and financial resources;
- (d) establishment of formal processes, based on specific policies, principles and associated criteria and following specified procedures;
- (e) strengthening of RICS/DLI’s powers and responsibilities in the licensing decision-making process through the legal framework;
- (f) extending prime responsibility for safety in the legislation;
- (g) provision for a system to ensure building and maintaining the competence of all parties having responsibilities in relation to the safety of facilities / installations and activities;
- (h) establishment of a programme of inspections that specifies the frequency of inspection taking into account the radiation risks associated with the facility / installation or activity, and areas and programmes to be inspected in accordance with a graded approach;
- (i) provision of a documented record of the findings communicated verbally to authorised parties at the end of an inspection;
- (j) establishment of limits for radioactive discharges based on operational constraints;
- (k) identification and dissemination of lessons learned from operating experience and regulatory experience;
- (l) establishment of a comprehensive human resource plan;
- (m) establishment of an integrated management system;
- (n) establishment of clear criteria for amendment, renewal, suspension or revocation of a license;
- (o) issuance of guides on regulating transport of radioactive material;
- (p) generic justification of radiological procedures.

The IRRS team also identified the following good practices:

- (a) RICS/DLI has a system for continuous assessment, implemented annually, for establishing and addressing the competence and training needs among its staff aimed at improving their contribution to achievement of organisational goals; and
- (b) the Government has stipulated in the Law that the regulatory authority should periodically conduct self-assessment and invite an international peer review with the aim of continuously improving safety.

RICS/DLI is implementing an action plan for the full implementation of the peer review recommendations and suggestions, with a view to invite a follow-up peer review mission in near future, probably in 2022.

Part of the peer review recommendations or suggestions have been implemented by amending the national legislation through the transposition of the Directives 2013/59/Euratom laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation and 2014/87/Euratom amending Directive 2009/71/Euratom that establishes a Community framework on the nuclear safety of nuclear installations.

RICS/DLI has made public the final report of the peer review on its website, has given its consent to IAEA for uploading the review report at the relevant IAEA website (<https://www.iaea.org/node/35185>) and also has communicated the report to the European Commission and the EU member states through the Council of the EU.

Moreover, Cyprus has invited an IAEA Integrated Review Service for Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation Programmes (ARTEMIS) peer review in Q4/2020, according to the provisions of the Law and the Council Directive 2011/70/Euratom for establishing a community framework for the responsible and safe management of spent fuel and radioactive waste and intends to make the final report public as well.

The regulatory authority aims, through self-assessments and accompanying peer reviews of the legislative, regulatory and organisational infrastructure, at strengthening and enhancing the national framework and ensuring a strong nuclear safety regime, by considering different approaches to the organisation and practices of the regulatory authority, exchange of professional experience and sharing lessons learned and good practices in an open and cooperative manner.

## Annex. References to national laws and regulations and other EU or international instruments

- [1] Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations.
- [2] [L. 127(I)/2011].
- [3] Council Directive 2014/87/Euratom of 8 July 2014 amending Directive 2009/71/Euratom establishing a Community framework for the nuclear safety of nuclear installations.
- [4] [L. 122(I)/2017].
- [5] The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security Law of 2018, L. 164(I)/2018.
- [6] Council Directive 2011/70/Euratom of 19 July 2011 for establishing a community framework for the responsible and safe management of spent fuel and radioactive waste.
- [7] Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom.
- [8] IAEA Safety Standards Series No. GSR Part 1 (Rev. 1) - Governmental, Legal and Regulatory Framework for Safety.
- [9] IAEA Safety Standards Series No. GSR Part 3 - Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards.
- [10] IAEA Code of Conduct on the Safety and Security of Radioactive Sources.
- [11] The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Basic Safety Standards for the Protection against the Dangers Arising from Exposure to Ionising Radiation) Regulations of 2018 (R.A.A. 374/2018).
- [12] The Protection against Ionising Radiation and Nuclear Safety (Responsible and Safe Management of Spent Fuel and Radioactive Waste) Regulations of 2014 (R.A.A. 178/2014).
- [13] The Protection against Ionising Radiation (Supervision and Control of Shipments of Radioactive Waste and Spent Fuel) Regulations of 2009 (R.A.A. 86/2009).
- [14] The Protection against Ionising Radiation and Nuclear Safety (Protection of the Health of the General Public from Radioactive Substances in Water Intended for Human Consumption) Regulations of 2016 (R.A.A. 54/2016).
- [15] The Convention on Nuclear Safety (Ratification) Law of 1998, L. 20(III)/1998.
- [16] The Conventions on Early Notification and Assistance in the case of Nuclear Accident (Ratification) Law of 1988, N. 164(III)/1988.
- [17] The Convention on Physical Protection of Nuclear Material (Ratification) Law of 1998, L. 3(III)/1998 and its amendment Law of 2012, L. 38(III)/2012.
- [18] The Joint Convention on the Safety of spent Fuel Management and on the Safety of Radioactive Waste Management (Ratification) Law of 2009, L. 13(III)/2009.
- [19] The Comprehensive Nuclear Test Ban Treaty (Ratification) Law of 2003, L. 32(III)/2003.
- [20] The Treaty on the Non-Proliferation of Nuclear Weapons (Ratification) Law of 1970, L. 8(III)/1970.
- [21] The Safeguards Agreement between Cyprus and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons (Ratification) Law of 1973, L. 3(III)/1973.
- [22] The Protocol Additional to the Safeguards Agreement between Cyprus and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons (Ratification) Law of 2002, L. 27(III)/2002.
- [23] The Agreement between the European Atomic Energy Community, and the Member States without nuclear weapons and the International Atomic Energy Agency, in application of Annexes 1 and 4 of Article III of the Treaty on the Non-Proliferation of Nuclear Weapons and its Additional Protocol (Ratification) Law of 2007, L. 37(III)/2007.
- [24] The Convention for the Suppression of Acts of Nuclear Terrorism (Ratification) Law of 2007, L. 44(III)/2007.
- [25] The UNSC Resolution 1540.

- [26] The IAEA Safety Regulations for the Transport of Radioactive Materials (SSR-6 rev. 1).
- [27] The United Nations Recommendations on the Transport of Dangerous Goods.
- [28] The European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR).
- [29] The International Maritime Dangerous Goods (IMDG) Code.
- [30] The International Civil Aviation Organisation (ICAO) Technical Instructions on the Safe Transport of Dangerous Goods.
- [31] The Universal Postal Union (UPU) Convention.
- [32] The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Specifications for practices, procedures and requirements of regulatory control relating to the notification or the granting of authorisation through registration or licensing) Notification of 2019 (R.A.A. 153/2019).
- [33] 7th CNS Review Meeting President's Report (CNS/7RM/2017/09/Final).
- [34] The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Standards for Education and Training in Radiation Protection and Nuclear and Radiological Safety and Security) Notification of 2019 (R.A.A. 327/2019).

## Contacts

Radiation Inspection and Control Service  
Department of Labour Inspection  
Ministry of Labour, Welfare and Social Insurance  
P.O.Box 24855, 1304 Nicosia  
Cyprus  
Tel.: +357 22405652, +357 22405623  
Fax: +357 22663788  
Email: [mtzortzis@dli.mlsi.gov.cy](mailto:mtzortzis@dli.mlsi.gov.cy), [info@dli.mlsi.gov.cy](mailto:info@dli.mlsi.gov.cy)  
Website: [www.mlsi.gov.cy/dli](http://www.mlsi.gov.cy/dli)