

**JOINT CONVENTION
ON THE SAFETY OF
SPENT FUEL
MANAGEMENT AND
ON THE SAFETY OF
RADIOACTIVE
WASTE
MANAGEMENT**

**NATIONAL
REPORT OF GREECE**

August 2024

Table of Contents

SECTION A	3
INTRODUCTION	3
SECTION B	4
POLICIES AND PRACTICES	4
Article 32 Reporting, paragraph 1	4
SECTION C.....	7
SCOPE OF APPLICATION	7
Article 3 Scope of Application	7
SECTION D.....	8
INVENTORIES AND LISTS	8
Article 32 Reporting, paragraph 2	8
SECTION E.....	9
LEGISLATIVE AND REGULATORY SYSTEM	9
Article 18 Implementing measures	9
Article 19 Legislative and Regulatory Framework	9
Article 20 Regulatory Body	12
SECTION F.....	14
OTHER GENERAL SAFETY PROVISIONS	14
Article 21 Responsibility of the license holder	14
Article 22 Human and financial resources	14
Article 24 Operational radiation protection	14
Article 25 Emergency preparedness.....	15
Article 26 Decommissioning.....	16
SECTION G.....	17
SAFETY OF SPENT FUEL MANAGEMENT	17
Article 4 General safety requirements.....	17
Article 5-9 Existing facilities, Siting of proposed facilities, Design and construction of facilities, Assessment of safety of facilities, operation of facilities	17
Article 10 Disposal of spent fuel	17
SECTION H.....	18

SAFETY OF RADIOACTIVE WASTE MANAGEMENT	18
Article 11 General safety requirements.....	18
Article 12 Existing facilities and past practices	19
Article 13 Siting of proposed facilities	19
Article 14 Design and construction of facilities.....	20
Article 15 Assessment of safety of facilities.....	20
Article 16 Operation of facilities	20
Article 17 Institutional measures after closure.....	21
SECTION I.....	22
TRANSBOUNDARY MOVEMENT.....	22
Article 27 Transboundary movement	22
SECTION J.....	23
DISUSED SEALED SOURCES	23
Article 28 Disused Sealed Sources	23
SECTION K.....	24
GENERAL EFFORTS TO IMPROVE SAFETY.....	24
SECTION L.....	27
Annexes.....	27
Annex I: Inventory of radioactive waste	27
Annex II: Overview matrix.....	28
List of abbreviations.....	29

SECTION A.

INTRODUCTION

Greece has signed the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management on 5 September 1997. The Convention has been ratified and entered into force on 16 March 2000.

The present report is the National Report of Greece for the 8th Review Meeting to the Convention, which will take place in 2025. The report has been prepared in accordance with the Guidelines regarding the Form and Structure of National Reports (Draft INFCIRC/604/Rev.5), established by the Contracting Parties under Article 29 of the Convention.

Greece has no nuclear power plants. The management of spent fuel (SF) is relevant only with respect to the operation of the research reactor (GRR-1) at the National Centre for Scientific Research "Demokritos" (NCSR "D"). GRR-1 is licensed for extended shutdown. The irradiated fuel was returned to the US Department of Energy (DoE) Savannah River National Laboratory February in 2019 and the remaining thirteen (13) fresh LEU fuel elements were exported to Canada to be used by the McMaster University research reactor, in May 2023.

Radioactive waste (RW) in Greece originates from medicine, research and industry. Short lived liquid or solid RW from the operation of medical and research laboratories are managed by decay and clearance. RW have also been produced from the past operation of GRR-1 and other activities of NCSR "D". RW also consists of equipment and consumer products containing radioactive materials (RM), such as smoke detectors, lightning rods, materials and objects contaminated with NORM. Disused radioactive sources (RS) are included in the national programme for the safe management of RW in order to be recycled or reused, and to avoid becoming waste.

The legal and regulatory framework for safety has been revised in 2023 by a ministerial decision (MD 35225/2023). This framework includes the national policy which is applied to the management of RW from production to disposal, for all RW resulting from civilian activities. It also includes the national programme (art. 25 of MD 35225/2023).

There is no disposal facility in Greece only a facility for interim storage of radioactive waste at the premises of the NCSR "D" (DRWIS). The license of the facility includes interim storage of RW and disused RS, low activity sources dismantling, characterization of RW, re-packaging and re-sorting of RW and RS and de-characterization and clearance of RW.

In 2023, an Integrated Review Service for Radioactive Waste and Spent Fuel, Decommissioning and Remediation (ARTEMIS) was conducted. The scope of the mission included the Greek national policy, framework, and strategy (national programme) for fulfilling the country's obligations for safe and sustainable management of RW. The review considered the management of all types of RW in Greece. The mission ended up with 15 findings (13 recommendations and 2 suggestions). 9 findings are addressed to the Government, 3 to NCSR "D" and 3 to the regulatory body.

Taking advantage of the ARTEMIS findings, as well as from the results of the self-assessment procedure Greece has identified *some challenges and areas of improvement* including: to update the national policy and strategy for the safe management of SF&RW, to include all interested parties in decision making, to finalize the procedures for the siting of the disposal facility and to establish a waste management organization (WMO) to carry out the necessary activities foreseen in the national programme. Also, it is suggested that the relevant stakeholders should consider taking measures to ensure the retention of knowledge and sufficient expertise in the area of RW. Following this, *an area of good performance* can be considered the decision made by the competent authority to award scholarships for postgraduate studies abroad in nuclear engineering subjects including, among others, SF & RW management.

SECTION B.

POLICIES AND PRACTICES

Article 32 Reporting, paragraph 1

In Ministerial Decision (MD) 35225/2023 and more specifically in article 4, the general principles of the national policy are provided. According to these principles

- The SF & RW producer or license holder has the *prime responsibility* for the management of the SF & RW concerned, until their natural decay to the regulated clearance levels or their shipment to an authorized RW management facility in Greece or abroad. The SF & RW producer or license holder undertakes all obligations deriving from the management method and shall bear the cost of their management (art. 5.1.f, 7.1 MD 35225/2023);
- *Safety is the highest priority* for the SF & RW management; national policy promotes the safety culture, through appropriate administrative structures with a clear division of responsibilities and well-defined lines of communication (art. 13.1.a MD 35225/2023);
- The import of SF & RW in Greece for any purpose, including processing, storage or disposal within the Greek territory, is prohibited (art. 18 MD 35225/2023);
- The disposal of RW is only permitted for RW that is produced within the Greek territory, and is carried out in an authorized disposal facility within the country. Until the operation of the disposal facility, the RW produced within the Greek territory is stored by the RW producers or other dedicated facilities under EEAE regulatory control (art. 4.1.a,b MD 35225/2023).

Moreover, there are the following provisions which address the respective points of the Article 32:

(i) SF management policy

According to art. 4.1c of MD 35225/2023, SF shall be returned, under the responsibility of the license holder, to a country that is a supplier or producer of fuel, based on applicable international agreements, which are concluded when the nuclear fuel is imported. Spent fuel final disposal in Greece is not presently considered as part of the Radioactive Waste Management National Policy.

(ii) SF management practices

The HEU of the GRR-1 was returned to the USA in 2005. The spent LEU has been repatriated to the USA in 2019, under an agreement with the US DoE. The remaining fresh LEU has been exported to be used to Canada in 2023. Moreover, in January 2024 the fresh natural Uranium at the Department of Nuclear Engineering of the School of Mechanical Engineering of the National Technical University of Athens (NTUA) has been exported to be reused.

There is also other nuclear material used for the research purposes (sub-critical assembly) at Aristotle University of Thessaloniki.

The nuclear material existing in Greece is subject to the control and regular inspection of IAEA and EURATOM Safeguards.

(iii) RW management policy

Storage of RW, disused Radioactive sources (RS) and Radioactive Material (RM) does not constitute a final RW management solution. The RW storage duration in an authorized RW management facility is specified in the terms of the facility's license, which, in any case, cannot cumulatively exceed one hundred (100) years (art. 21.1.a, b MD 35225/2023). Regarding sealed radioactive sources, according to the article 4.1.d of MD 35225/2023, formal acceptance of the importer and manufacturer shall be

in place prior the import of a sealed source to return the source back to the manufacturer after the end or its utilization period.

Other important elements of the national policy are as follows:

- The production of RW is kept at the minimum level reasonably achievable in terms of activity and volume through appropriate design measures and operational and decommissioning practices, including recycling and reuse of materials (art. 4.1.e of MD 35225/2023);
- The interdependencies between all stages of production and management of RW are taken into consideration (art. 4.1.f of MD 35225/2023);
- RW are managed safely, including their long-term management, with passive safety features (art. 4.1.g of MD 35225/2023). The implementation of the measures follows a graded approach, depending on the nature and magnitude of the risk involved in each case (art. 4.1.h of MD 35225/2023);
- The requirements, decisions taken, proposed solutions, as well as regulatory inspections and checks concerning the SF & RW management follow a graded approach (art. 4.1.h, 17.1 of MD 35225/2023);
- An evidence-based decision-making process is applied at all stages of RW management (art. 4.1.j of MD 35225/2023);
- RW produced within a practice or activity may be temporally stored in the facility where it was produced, under EEAE's regulatory control. After the storage duration defined in the terms of the license expires, RW is either cleared following the radiation protection provisions and the authorized clearance levels, or it is transferred to a RW management facility (art. 21.1.c of MD 35225/2023).

For the very short-lived waste (VSLW) originating from practices, such as nuclear medicine or research laboratories, the decay and clearance options are applied.

(iv) radioactive waste management practices

RW in Greece originates from medicine, research - including the past operation of the GRR-1 - and industry. The vast majority of them are VSLW, VLLW and LLW. A very small amount of ILW waste may eventually arise, mainly from some parts of the dismantled core of the reactor.

Nuclear medicine waste is appropriately stored on site until decay. Special retention tanks might be required in nuclear medicine laboratories performing therapeutic procedures with I-131. Liquid waste is disposed through the laboratory dedicated and marked pipelines to the municipal sewage system. On site storage of radioactive waste and sources is covered by the operational license of the facility. Disused sources or some other radioactive material (e.g. consumer products, such as lightning rods and smoke detectors) are also stored on site countrywide under regulatory control.

Furthermore, financial resources to cover intervention costs relating to the recovery and management of orphan or disused sources are provided by a financial security fund operating within the Special Account of EEAE.

(v) criteria used to define and categorize radioactive waste

In Greece, RW is classified according to IAEA Safety Standards Series GSG-1. However, waste originating from the operation of GRR-1 and activities performed at NCSR "D" site are classified according to origin and type. Classification of RW from other facilities and activities is also based on origin and type. The aim is that all RW, after further characterization, will be re-classified according to the provisions in GSG-1. Below is the information provided on EEAE website on the RW classification:

- VSLW: half-lives < 100 days. This category includes waste that can be released into the environment in accordance with the radiation protection regulations.

- VLLW: half-life <30 years and activity values twice the exemption values of appendix 7 of the PD 101/2018. Waste with isotopes with higher half-lives (e.g., Ra-226) may also be considered as VLLW, if the activity is low. Some examples are items containing Ra-226 for fluorescence, smoke detectors with Am-241, and soil contaminated with NORM (Ra-226) at low concentrations.
- LLW: half-life >30 years, activity concentration < 400 Bq/g (on average, for radioisotopes emitting α radiation) or 10 kBq/g (on average, for isotopes emitting β or γ radiation).
- ILW: waste that does not belong to the previous categories with long half-life times and high concentrations. Such waste may result from the decommissioning of the GRR-1 research reactor of NCSR "D".

SECTION C.

SCOPE OF APPLICATION

Article 3 Scope of Application

- a) As already mentioned in Sections A and B, SF management in Greece concerns only the GRR-1 whose spent fuel has been repatriated to the USA. There are no reprocessing facilities in Greece.
- b) The facilities responsible for activities involving NORM are under regulatory control following the provisions of the Radiation Protection Regulations (Presidential Degree 101/2018 and Ministerial Decision 45872/2019). The NORM in such facilities are not considered radioactive waste. Moreover, on an ad-hoc basis some objects contaminated with NORM are included in the national inventory. These objects are stored in licensed facilities or at DRWIS.
- c) Greece has not declared as radioactive waste for the purposes of the Convention any waste within military or defense programs.

SECTION D.

INVENTORIES AND LISTS

Article 32 Reporting, paragraph 2

(i) Spent fuel management facilities

There are no spent fuel management facilities in Greece.

(ii) Inventory of spent fuel

There is no spent fuel in Greece.

(iii) Radioactive waste management facilities

The only facility in Greece, serving currently as an interim storage facility of RW is the DRWIS (NCSR “D” Radioactive Waste Interim Storage).

The DRWIS facility operates under the Institute of Nuclear and Radiological Sciences & Technology, Energy & Safety. The license of the facility includes interim storage of RW and disused RS, low activity sources decommissioning, characterization of RW, repackaging and re-sorting of RW and RS and de-characterization and clearance of RW. The legislative basis for the licensing of the facility lies in the Radiation Protection Regulations (PD 101/2018 and Ministerial Decision 45872/2019) and the legislative documents for the safe and secure management of radioactive waste. IAEA safety standards are also used by EEAE for the review and assessment of the safety of the facility.

The DRWIS facility stores disused radioactive material and sealed radioactive sources in gauges, lightning rods, smoke detectors, neutron sources, industrial sources, contaminated objects from the GRR-1 research reactor operation (resins in drums), contaminated biological waste in concrete, Pu contaminated soil.

In 2021 a memorandum of understanding was signed between EEAE and NCSR “D”, which, among others, provides that radioactive sources (e.g. orphan or out of regulatory control) may temporarily be stored in the interim storage facility till their disposal, whenever there is a clear and urgent need based on EEAE judgement, from the safety, security and radiation protection point of view. The financial resources to cover intervention costs relating to the recovery and management of orphan and potentially out of regulatory control sources are provided by EEAE and the State.

(iv) Inventory of radioactive waste

The current data for the national inventory of radioactive waste are provided in Annex I.

EEAE is responsible for keeping the inventory containing information about the location of the main features of the radioactive sources such as radionuclides, activity, volume mass, etc, where applicable.

(v) Nuclear facilities in the process of being decommissioned

None.

As mentioned in Section A the only nuclear facility in Greece is the research reactor GRR-1 at NCSR “D”, currently licensed for extended shutdown.

SECTION E.

LEGISLATIVE AND REGULATORY SYSTEM

Article 18 Implementing measures

The Joint Convention has been ratified and entered into force in Greece on 16 March 2000 by the Law 2824/2000 (Government Gazette Folio 90/A/16.03.2000) "Ratification of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management".

Article 19 Legislative and Regulatory Framework

A list of the legislative documents relevant to this Convention are given below.

Radioactive waste

- Ministerial Decision 35225/12.04.2023, Legislative, regulatory and organizational framework for the responsible and safe management of spent fuel and radioactive waste - Adaptation of the Greek legislation to Council Directive 2011/70/Euratom of 19 July 2011 on the establishment of a Community framework for the responsible and safe management of spent fuel and radioactive waste (OJ L 199/02.08.2011) National programme for the management of spent fuel and radioactive waste, Government Gazette Folio 2638/B/21.04.23;
- Ministerial Decision ΥΠΕΧΩΔΕ/ΕΥΠΕ/οικ. 107017/28.08.2006, Assessment of the environmental impact of certain plans and programs, in compliance with provisions of Directive 2001/42/EC "on the assessment of the environmental impact of certain plans and programs" of the European Parliament and of the Council of 27 June 2001 as applicable, amended in accordance with Ministerial Decisions οικ. 40238/2017, Government Gazette 3759/B/25.10.2017 and ΥΠΕΝ/ΔΙΠΑ/38181/2695/2022, Government Gazette 1923/B' 18.4.2022, Government Gazette Folio 1225/B/05.09.2006.

Nuclear installations

The legislative framework with regard to nuclear installations is as follows:

- Act 854/1971, On the terms regarding the establishment and operation of nuclear facilities, Government Gazette Folio 54/A/18.03.1971;
- Presidential Decree 610, Establishing terms and procedures in licensing Public Power Corporation to construct a nuclear power plant on a specific site, Government Gazette Folio 130/A/23.08.1978;

In early 1980s, a decision was made to exclude nuclear power electricity generation. Therefore, the above two pieces of legislation have never been used and can be considered as archival pieces of legislation.

- Presidential Decree 60/2012, Establishing a National framework for the nuclear safety of nuclear installations (transposition of the Council Directive 2009/71/ Euratom of 25 June 2009), Government Gazette Folio 111/A/03.05.2012.

Nuclear research reactors

- Ministerial Decision 84631/07.08.2020, Amendment of the Decision P/112/305/2012 (B' 2877) Main requirements – principles of nuclear safety and regulatory control of research

reactors as amended by Decision 91175/2017 (B' 1991) transposing Council Directive 2014/87/Euratom, Government Gazette Folio 3389/B/13.08.2020;

- Ministerial Decision 91175/31.05.2017, Amendment of the Decision P/112/305/2012 (B' 2877/26.10.2012) Basic requirements – principles of nuclear safety and regulatory control of research reactors (transposition of the Directive 2014/87/Euratom), Government Gazette Folio 1991/B/09.06.2017;
- Ministerial Decision P/112/305/2012, Basic requirements – principles of nuclear safety and regulatory control of nuclear research reactors, Government Gazette Folio 2877/B/26.10.2012.

Implementation of the International obligations

- Law 2480/1997, Ratification of the Nuclear Safety Convention, Government Gazette Folio 70/A/14.05.1997;
- Law 1636/1986, Ratification of the Convention on the physical protection of nuclear material, Government Gazette Folio 106/A/18.07.1986;
- Law 1758/1988, Ratification of the Protocol Amending the Convention on Third Party Liability on the Field of Nuclear Energy of 29 July 1960, as it was modified by the Additional Protocol of the 28 January 1964, Government Gazette Folio 44/A/10.03/1988;
- Law 1937/1991, Ratification of the International Convention in case of a Nuclear Accident or Radiological Emergencies, Government Gazette Folio 35/A/13.03/ 1991;
- Law 1938/1991, Ratification of the International Treaty on Early Notification in case of a Nuclear Accident, Government Gazette Folio 36/A/13.03.1991;
- Law 2824/2000, Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, Government Gazette Folio 90/A/16.03.2000;
- Law 3787/2009, Ratification of the Protocol amending the Convention on Third Party Liability in the field of nuclear energy of 29 July 1960, as amended by the additional protocol of 28 January 1964 and by the Protocol of 16 November 1982, Government Gazette Folio 140/A/07.08.2009;
- Law 3990/2011, Amendment of the Convention of Physical Protection of Nuclear Materials, Government Gazette Folio 159/A/13.07.2011.

Safeguards and non-proliferation

- Law 437/1970, Ratification of the non-proliferation treaty signed on the 1 June 1968, Government Gazette Folio 49/A/26.02.1970;
- Safeguards agreement between Greece and IAEA signed on 17.11.1972;
- Ministerial Decision 5408/E3/2362, Control on transfer of nuclear materials, armament and technologies affecting national Defense and Security, Government Gazette Folio 730/B/21.09.1993;
- Law 2805/2000, Ratification of the additional protocol, Government Gazette Folio 50/A/03.03.2000.

Radiological protection

- Law 181/1974, Protection against ionizing radiation, Government Gazette Folio 347/A/20.11.1974;
- Presidential Decree 101/2018, Adaptation of the Greek legislation to Council Directive 2013/59/Euratom of December 5, 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/ (EE L13/17.1.2014) - Establishment of radiation protection regulations, Government Gazette Folio 194/A/20.11.2018;

- Ministerial Decision 45872/2019, Procedures for the regulatory control of practices of ionizing radiation – approval and recognition of services and experts, Government Gazette Folio 1103/B/03.04.2019;
- Ministerial Decision 135966/30.12.2019, Implementation of existing exposure situation strategies, Government Gazette Folio 5116/B/31.12.2019;
- Ministerial Decision 43374/4.10.2020, National action plan for addressing long-term risks from radon exposure, Government Gazette Folio 1881/B/13.08.2020;
- EEAE Decision 4a/261/2019, Establishment of mechanisms for the recognition of radiation protection experts, medical physics experts and occupational health services, authorization of dosimetry services and the approval of radiation protection officers, Government Gazette Folio 2460/B/21.06.2019;
- EEAE Decision 4b/261/2019, Establishment of the dose constraints for public exposure from planned operation of a specified radiation source, Government Gazette Folio 2460/B/21.06.2019;
- EEAE Decision 4c/261/2019, Specific measures for the safe management and control of high activity sealed sources, Government Gazette Folio 2460/B/21.06.2019;
- EEAE Decision 4d/261/2019, Submission and access to the results of individual monitoring, Government Gazette Folio 2460/B/21.06.2019;
- EEAE Decision 4/266/2020, Description of incidents involving or possibly involving accidental or unintentional exposure during medical exposure to be reported directly to the Greek Atomic Energy Commission, Government Gazette Folio 214/B/03.02.2020.

Establishment of the regulatory body

- Law 1733/1987, Transfer of Technology, inventions, technological innovation and establishment of the Greek Atomic Energy Commission, Government Gazette, Folio 171/A/22.09.1987;
- Law 4310/2014, Research, Technological Development and Innovation and other provisions (Chapter E' - Nuclear Energy, Technology and Radiation Protection – Greek Atomic Energy Commission (EEAE)), as applicable, amended in accordance with Law No. 4982, Government Gazette, Folio No. 195, First Issue, October 15, 2022, “Establishment, development, management and operation of Business Parks - Unified regulatory framework for Organized Receptors of Manufacturing and Business Activities and other provisions to enhance development” (in particular Chapter C – Provisions for individual energy and radiation protection, Articles 60-68), Government Gazette Folio 258/A/08.12.2014;
- Presidential Decree 67/2022, Organization of the Greek Atomic Energy Commission (EEAE), Government Gazette Folio 173/A/14.09.2022.

Emergency preparedness

- Law 3013/2002, Upgrade of the General Secretariat for Civil Protection, Government Gazette Folio 102/A/1.5.2002, as in force;
- Presidential Decree 101/2018, Adaptation of the Greek legislation to Council Directive 2013/59/Euratom of December 5, 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/ (EE L13/17.1.2014) - Establishment of radiation protection regulations, Government Gazette Folio No 194/A/20.11.2018 (Section 5 and Annex XI);

- Ministerial Decision 1299/2003, Approval of the General Plan for Civil Protection, under the Code Name Xenokratis, Government Gazette Folio 423/B/10.04.2003;
- Decision of the General Secretary for Civil Protection, Guidelines for the management of CBRN threats, October 2020;
- Decision of the General Secretary for Civil Protection, General Plan for Emergency Response due to accidents during Road and Rail Transport of Dangerous Goods according to ADR / RID regulations, 1st version, June 2020;
- Decision of the General Secretary for Civil Protection, Special response plan for a radiological emergency (ESARPEA) following an accident at a facility of category III, 1st version, September 2021;
- Decision of the General Secretary for Civil Protection, Special response plan for a radiological or nuclear emergency (ESARPEA) due to a serious accident at a nuclear facility abroad, 1st version, May 2022.

Other relevant legislation

- Presidential Decree 83/2010, Transposition of Council Directive 2006/117/Euratom of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel into the Greek legislative framework, Government Gazette Folio 147/A/03.09.2010;
- Ministerial Decision P/112/1057/2016/01.02.2016, Establishment of requirements for the protection of the health of the general public with regard to radioactive substances in water intended for human consumption, in compliance with the Council Directive 2013/51/Euratom of 22th of October 2013, Government Gazette Folio 241/B/09.02.2016.

Article 20 Regulatory Body

According to art. 43 of Law 4310/2014, EEAE operates as an autonomous public entity and enjoys administrative and financial independence in relation to its regulatory tasks. It is supervised by the Deputy Minister of Development. EEAE is governed by a seven-member Board appointed for a three-year period by the supervisory Ministry.

EEAE is designated as the regulatory competent authority for the control, the regulation and the supervision of the sector of nuclear technology, radiological and nuclear safety and radiation protection. EEAE is empowered to take regulatory decisions with regard to radiation safety independently. The processes for licensing, review & assessment, inspection and enforcement are included as core processes within EEAE integrated management system.

EEAE has a 69-member staff. Most of them hold higher education degrees, postgraduate qualifications and specialization skills in scientific knowledge and expertise. Continuous training and participation in scientific networks are encouraged, in order to enhance their knowledge and experience, as required for the fulfilment of their tasks.

EEAE financial resources come from the public budget, as well as licensing fees, externally funded projects and the provision of technical services. The accounts and fiscal reports of EEAE are subject to the control of the Audit Council. These data and fiscal reports, together with the budget estimation for the coming year, are published on EEAE website and submitted to the President of the Hellenic Parliament and the relevant Minister as part of the Annual Report.

The detailed organizational structure of EEAE is established in Presidential Decree 67/2022 (see Fig. 1).

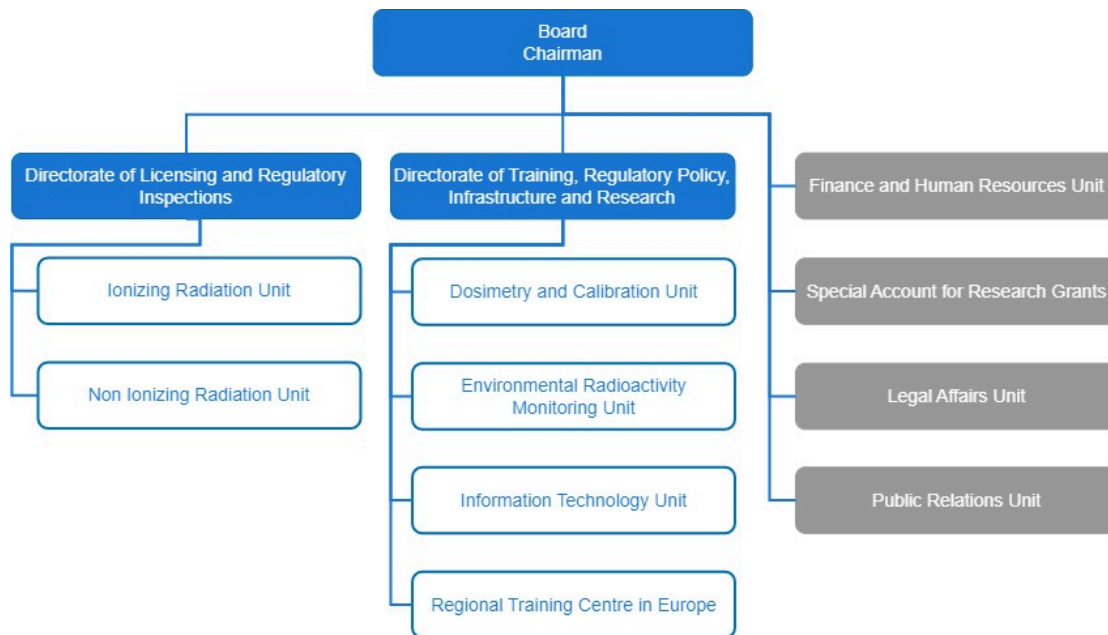


Figure 1. Organizational chart of EEAE

Regarding the spent fuel and radioactive waste management, EEAE:

- is functionally separated from any other body or organization related to the promotion of or use of nuclear energy or radioactive materials, including the production of electricity and radioisotope applications, or with the management of SF & RW, in order to ensure effective independence from undue influence on its regulatory tasks;
- has the legal capacity and the human and financial resources necessary to fulfil its obligations in relation to the national framework and more specifically the following:
 - the adoption of new or additional regulations, guidelines and recommendations,
 - a system for the licensing of activities and/or SF & RW management facilities,
 - a system of appropriate controls, regulatory inspections, documentation and reporting for activities and/or for SF & RW facilities, including appropriate measures for the post-closure period of a disposal facility,
 - enforcement measures, including suspension or revocation of an authorization.

SECTION F.

OTHER GENERAL SAFETY PROVISIONS

Article 21 Responsibility of the license holder

The prime responsibility for the safety of SF & RW management facilities and activities rests with the licensee. This responsibility cannot be transferred. License holders, under the regulatory control of EEAE, periodically assess, confirm and continuously improve, to the extent possible, safety, in a systematic and verifiable manner (art. 7.1 of MD 35225/2023)

Article 22 Human and financial resources

Article 7.5 of MD 35225/2023 provides for the general requirements for human and financial resources of the licensees in order to fulfill their obligations with respect to the safety of SF&RW management.

Article 23 Quality assurance

According to article 7.4 of MD 35225/2023, license holders of SF&RW management facility shall implement an integrated management program, including quality assurance (QA) program. The license holder shall have a QA program in place, to implement all planned and systematic actions required to sufficiently ensure that a structure, system, component or procedure relating to SF&RW management, at all stages or a part thereof, operates satisfactorily. The QA program shall be approved by EEAE.

The current QA program of the interim facility is based on:

- Program Overview with the scope and goals of the QA;
- Organizational Structure describing the Roles and Responsibilities;
- Documentation and Records Management;
- Waste Characterization Methods;
- Operational Procedures that is Standard operating procedures (SOPs) for handling, processing, and disposing of waste;
- Compliance and Regulatory Requirements;
- Incident Reporting: Protocols for reporting and addressing incidents;
- Emergency Response Plans;
- Regular reporting mechanisms within the facility as well as External Reporting to the regulatory body.

Article 24 Operational radiation protection

The activities of the license holder fall within the framework of the Radiation Protection Regulations (PD 101/2018). All radiation protection measures are submitted to EEAE for review and assessment.

More specifically, in PD 101/2018 the following provisions are in place:

- The principles of optimization and dose limitation are applied (Article 5);
- Measures are taken by the licensee for the protection of members of the public and long-term health protection in normal circumstances (Articles 65-68) and emergency situations (Articles 69-70);
- The license procedure includes, inter alia, an environmental study about the impact of the discharges to the environment, considering that the effective dose expected to be incurred by a member of the public is of the order of 10 μ Sv or less in a year (Annex 7 of PD 101/2018 and Article 19 of MD 45872/2019).

In particular, the radiation protection program of the interim storage facility that was submitted to EEAE includes:

- General Principles and Policies;
- Dose limits and Dose Constraints;
- Radiation protection program commitments;
- Activity Work Control, Radiation Work Permits;
- Surveys and Monitoring;
- Exposure Control;
- Monitoring of External/Internal Exposure;
- Control of Radioactive Material;
- Instrumentation;
- Radioactive Waste Management;
- Identification of Waste Streams;
- Clearance Criteria and Methods to Verify Clearance;
- Occupational Safety;
- Physical Security; and
- Emergency Plan.

Article 25 Emergency preparedness

a) Internal emergency plans

According to the legislative framework, in case of a radiological accident or event an internal emergency plan shall be in place (see Fig.2), which is subject to regulatory review (art. 97 of the PD 101/2018). Moreover, in MD 35225/2023 (art. 7.3) it is provided that license holders shall implement measures for the prevention of accidents and for the mitigation of their consequences, in order to protect the workers and the public from significant exposures to radiation.

The emergency plan for the interim storage facility is based on the assessment of the possible hazards that might arise: (i) during the RW management activities; (ii) in case of fire; (iii) in case of larceny.

b) National emergency plans

The General Civil Protection, Emergency, Plan (GCPP), under the code name “Xenokratis”, applies to any emergency situation in the Greek territory.

According to PD 101/2018 a detailed assessment of nuclear and radiation potential events is performed by EEAE and approved by GSCP (referred to as “ADKEA”), based on the GSR Part 7

methodology. For each threat identified in ADKEA, an emergency response plan has been developed (“Special Response Plans in Case of a Radiological or Nuclear Emergency”, referred to as “ESARPEA”). CBRN consists one specific case of ESARPEA. The structure of the GCPP is shown in Figure 2.

EEAE has also its own internal emergency preparedness and response plan.

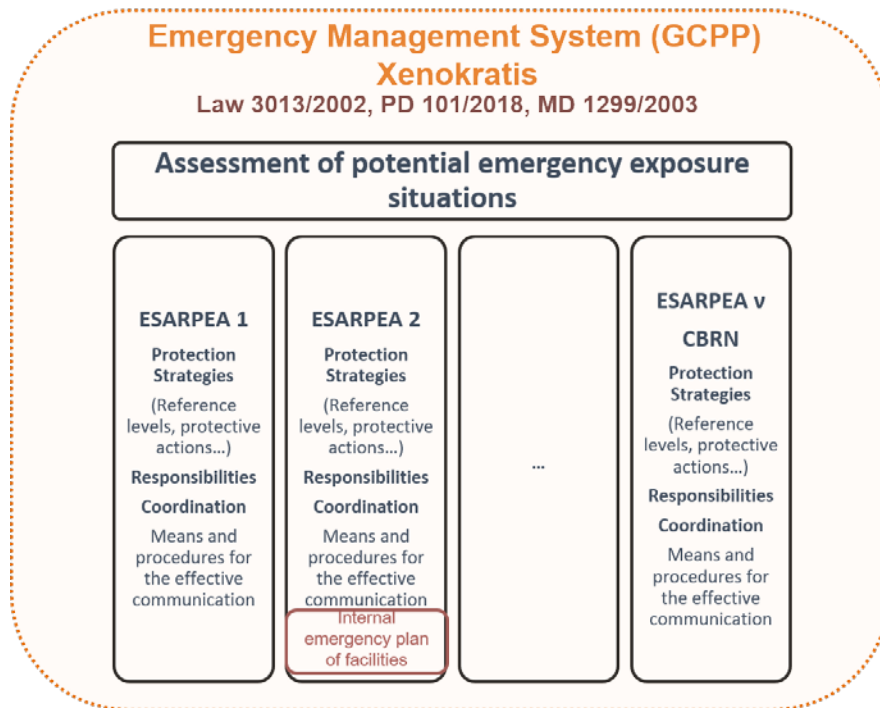


Figure 2. The structure of the General Civil Protection Plan for emergency exposure situations

Article 26 Decommissioning

The licenses/permits for the various stages of a research reactor lifetime are issued by EEAE or by the Ministry responsible for EEAE. More specifically, decommissioning license is issued by the relevant Minister, upon EEAE agreement.

Based on the provisions of article 12 of MD P/112/305/2012 the decommissioning process shall be performed in accordance with the decommissioning plan, including measures to ensure the financial resources and analysis of the environmental impact assessment.

GRR-1 is licensed for extended shutdown, with the current license expiring in 2024. According to the documentation submitted for the renewal of the license EEAE has asked NCSR “D” to complete the decommissioning plan by the end of 2024. This issue is addressed in one of the findings of the ARTEMIS mission (R7).

SECTION G.

SAFETY OF SPENT FUEL MANAGEMENT

Article 4 General safety requirements

Greece has only one research reactor (GRR-1), which is in extended shutdown. All fuel, spent or irradiated or fresh, has been exported to the USA and Canada, and its core has been disassembled. There are no plans for a nuclear power program or for additional research reactors.

Article 5-9 Existing facilities, Siting of proposed facilities, Design and construction of facilities, Assessment of safety of facilities, operation of facilities

There are no spent fuel management facilities in Greece. It is not foreseen to design or construct any.

Article 10 Disposal of spent fuel

Based on the provisions of article 4.1.c of MD 35225/2023 spent fuel from research reactors shall be permanently shipped to a country where research reactor fuels are supplied or manufactured, considering applicable international agreements, which must be concluded upon import of the nuclear fuel.

SECTION H.

SAFETY OF RADIOACTIVE WASTE MANAGEMENT

Article 11 General safety requirements

General safety requirements, pertaining in particular to RW management, are provided in MD 35225/2023. These requirements include the following (the i to vii points correspond to the respective points of Article 11):

- (i) In article 19 of the MD P/112/305 a safety analysis report is required for the research reactor license applicants in order to ensure high-level safety, throughout the life-cycle of the facility. The safety analysis report shall include, among others, information to ensure that criticality and removal of residual heat generated during fuel management is adequately considered;
- (ii) In article 4.1e of MD 35225/2023 it is provided that the national policy shall be based, inter alia, on the fact that the generation of radioactive waste shall be kept to the minimum which is reasonably practicable, both in terms of activity and volume, by means of appropriate design measures and of operating and decommissioning practices, including the recycling and reuse of materials.
- (iii) In article 4.1f of MD 35225/2023 it is stated that the national policy shall also be based on the interdependencies between all steps in spent fuel and radioactive waste generation and management.
- (iv) In article 4.5 of MD 35225/2023 it is provided that the protection of workers, members of the public and the environment is ensured by the application of radiation protection principles as described in the relevant provisions of the Radiation Protection Regulations for the implementation of practices, with the term “practice” also meaning Radioactive Waste and spent fuel management activity. The Radiation Protection Regulations are based on IAEA safety standards and the 2013/59/Euratom directive laying down basic safety standards for protection against the dangers arising from exposure to ionizing radiation.
- (v) In article 14.1 of MD 35225/2023 it is stressed that the radioactive disposal facility shall be sited, designed and operate with a view to isolating waste from humans and the biosphere for a prolonged period of time (more than 1000 years). To that end, the natural evolution of the facility’s natural environment, as well as any potential incidents that may have an impact on the facility, shall be taken into account. Moreover, aspects affecting the safety of the disposal, including natural (geological) and man-made barriers, and the expected evolution of the disposal system over time, in particular after closure of the facility, are adequately analyzed.
- (vi) In article 7.3 of MD 35225/2023 it is provided that as part of the licensing process, the applicant or the license holder proves the safety of the installation. This proof covers the operation and the decommissioning of the facility as well as the stage after the closure of a disposal facility. The licensing process covers the safety of the facility or activity, under normal operating conditions, in the event of foreseeable events and in the event of potential accidents that have been considered in the design phase. License holders apply safety measures to prevent accidents and limit their consequences.

- (vii) The main objective of MD 35225/2023 is to supplement and expand the existing national legislative, regulatory and organizational framework in order to ensure the responsible and safe management of SF&RW and avoid any undue burden on future generations.

Article 12 Existing facilities and past practices

The operation license of the existing interim storage facility was last renewed in 2022. The current license includes terms related to the update of the safety report, the upgrade of the security system, the recording and characterization of all disused sources and waste and the training of personnel regarding the fire protection plan. The ARTEMIS Team addressed a recommendation to NCSR “D” (the operator of the interim storage) that the safety report should be updated.

Moreover, as mentioned previously, the safety of the on-site storage of institutional radioactive waste and sources countrywide is evaluated as part of the operation licensing and through inspections.

For the responses to Articles 13-15 it should be considered that, currently, there are no applications for operating storage and disposal facilities in Greece.

The provisions mentioned in the following Articles 13 to 17 are going to be described in detail in a joint ministerial decision as foreseen in article 16.4 of MD 35225/2023. This issue is covered in ARTEMIS recommendations, R9 and R10, addressed to the Government and the regulatory body, respectively.

Article 13 Siting of proposed facilities

In article 14 of MD 35225/2023 it is provided that the siting of the RW management facility is assessed under the responsibility of the license applicant. Within this assessment the applicant assesses the possible effects of the facility on the population and the environment, under normal conditions and in accident conditions, at all stages of life of the facility.

Moreover, the following provisions of MD 35225/2023 address the (i) to (iv) points of Article 13:

- (i) The evaluation of the site of the RW disposal facility must be performed in a way that ensures, to the extent possible, safety by means of passive measures and minimizes the need for measures and actions after the facility’s closure.
- (ii) The RW management facility site shall be examined in detail, in order to understand the characteristics of the site and their evolution in time, taking account of the current circumstances, the possible natural evolution and possible natural events, as well as the existing human projects and activities in the region, which may affect the safety of the facility.
- (iii) Both the Minister of Development and the Minister of Environment and Energy take the necessary actions to:
 - a. make available to the public the necessary general information regarding the SF & RW management (art. 10 of MD 35225/2023);
 - b. enable the public to meaningfully participate in the decision-making process regarding the SF & RW management, in accordance with national legislation and international obligations (art. 10 of MD 35225/2023).
- (iv) The obligation to provide the public with necessary information and capacity to participate in decision-taking may also cover the case of the public in a neighboring country (see previous point iii.b). Also, Greece is signatory part of the Espoo Convention and therefore is subject to the general obligation to notify and consult with other States on projects that are likely to have an environmental impact across boundaries.

Article 14 Design and construction of facilities

Regarding the design and construction requirements there are the following provisions in articles 13.4 and 13.6.b of MD 35225/2023:

- The design of the facility shall include multiple, reliable and mutually independent safety levels, as well as barriers (safety mechanisms) to prevent the release of radioactive materials to the environment. The primary objective of the design shall be the prevention of accidents, and in case this occurs, the mitigation of the effects.
- The facility design shall ensure reliable, smooth and manageable operation.
- The facility design shall include technology proven for its reliability.
- The design shall aim to keep the impact on the environment and the exposure of the employees and population to radiation to the minimum reasonably possible, in accordance with the optimization principle, including the application of dose constraints.
- The facility shall be constructed in accordance with the approved design and modifications and the environmental impact assessment.

Article 15 Assessment of safety of facilities

Regarding the assessment of facilities in article 13.2 of MD 35225/2023 it is noted that as part of the licensing process, applicants for a license are required to demonstrate the safety of the facility and/or activity. This safety demonstration shall cover the development and operation of an activity and the development, operation and decommissioning of a facility or closure of a disposal facility, considering the complexity and size of the facility and/or activity. This process shall ensure safety in the facility or activity during normal operating conditions, potential incidents and accidents.

Article 16 Operation of facilities

Regarding the operation of RW facilities there are the following provisions in article 13.5 of MD 35225/2023:

- The operation of the facility shall be carried out in accordance with detailed and explicitly set operational limits and conditions, including the proper waste acceptance criteria. The operational limits and conditions shall be updated on the basis of experience obtained by the operation or in case of modifications in the facility.
- The operation, maintenance, modifications and use of the facility shall be carried out by sufficiently trained personnel, based on procedures explicitly set by the license holder.
- The license holder shall immediately notify EEAE of all incidents relevant to safety and nuclear security, their analysis and all the appropriate corrective actions taken to optimize safety and protection of the employees, population and environment.
- The license holder shall keep a complete and updated record throughout the facility's life-cycle. This record shall include the facility designs and any modifications thereof, maintenance, as well as information important to safety. Moreover, a complete record of events shall be kept.

Further requirements exist regarding safety policy and safety culture, management system and recording, emergency plans, management and mitigation of events and accidents, radiation protection and physical protection.

Article 17 Institutional measures after closure

The sitting design, construction, operation and closure of the RW disposal facility shall be carried out in such a way as to maximize passive means-based safety and minimize the need for additional measures and actions after the facility closure (art. 14.1.b of MD 35225/2023).

Moreover, the national program (point 7 of article 25 of MD35225/2023,) states that plans after closure are intended to include measures to secure financial resources, passive and active measures to control the facility, and environmental monitoring measures. The period during which the facility is required to be under administrative and/or regulatory control and the requirements for monitoring radioactivity in the environment, and especially in water, during this period and any later, if required, are determined based on decay of the disposed RW, the environmental impact study and the safety analysis.

Finally, regarding the record keeping the license holder shall keep complete and updated records throughout the facility's life-cycle. These records shall include the facility designs and any modifications, maintenance, as well as information important to safety.

SECTION I.

TRANSBOUNDARY MOVEMENT

Article 27 Transboundary movement

Shipment of radioactive waste from Greece to other European countries or to a third country is addressed in PD 83/2010 (147/A/3.10.2010) "Compliance of Greek legislation with Council Directive 2006/117/Euratom of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent nuclear fuel" according to which EEAE shall inform accordingly the EURATOM prior to shipment. Shipment is allowed to countries that have a relevant agreement with EURATOM or they are contracting parties to the Joint Convention and have a national radioactive waste management program and existing management facilities that can handle the type of the shipped waste.

SECTION J.

DISUSED SEALED SOURCES

Article 28 Disused Sealed Sources

In Greece there are no manufacturers of sealed sources.

All sealed sources are imported. According to article 87 of PD 101/2018, the licensee, in order to import a sealed radioactive source, shall take all the appropriate measures for the safe management of the sources when they become disused, including the foreign supplier's commitment to take the source back.

Specific measures for the above provisions are described in EEAE Decision 4c/261/2019. According to this document the licensee shall:

- keep the documentation of the sealed source as provided by the manufacturer in accordance with Annex XVI of PD 101/2018 and especially the certificate of source and certificate of transport container;
- submit to EEAE updated records of the sealed source;
- check uninterruptedly that each sealed source is still located in the appropriate place of use or storage;
- return the sealed source to the manufacturer or supplier or in an approved RW facility before the expiration of the validity of the source certificate or within the term of the contract, regardless if the source is in use or useful for use.

SECTION K.

GENERAL EFFORTS TO IMPROVE SAFETY

Measures taken to address Suggestions and Challenges identified at previous review meeting

Two challenges were identified for Greece in the previous review meeting. Actions taken to address those challenges are described below:

- To make a success of the national project “Recovery and Resilience Facility (RRF)”. The project includes two basic work packages: (i) the export of RS for recycling; up to now almost 80% of the total activity of the disused sources in Greece have been included in the project to be exported abroad for reuse or recycle and (ii) the characterization and the re-packaging of the historical RW of the NCSR “D”; this part is going to start in the beginning of September and will be completed by mid-2025.
- To take a decision whether a disposal facility is going to be at new site or at NCSR “D” site. A preliminary study for the site of a disposal facility has been conducted, which among other considers physical, geological and hydrological issues, radiation protection and environmental impact of the specific site. A near surface disposal facility with engineered barriers (vault) and possibly a borehole, if necessary for the disposal of RS, is considered. The suitability of the site of the NCSR “D” to accommodate a RW disposal facility is investigated. The preliminary study showed that safety criteria may be satisfied but further hydrogeological and geochemical analyses are required to provide the parametric data needed for a final, conclusive radiological impact assessment study.

Strong features in current practices

The strong features can be summarized as follows:

- The strong collaboration established through the discussions and meetings of the ARTEMIS mission between EEAE and NCSR 'D' which enable them to continue working together on RW management, leveraging the momentum gained during the mission.
- The comprehensive review that was done during the self-assessment period and preparation for the ARTEMIS which allowed the evaluation of the national policy and strategy against international standards/European directives.

Areas of Good Performance

Two areas of good performance are identified as follows:

- For the first time in Greece, a multiannual budget for RW management has been officially published in the Government Gazette, demonstrating the commitment of the government to the purposes of the RW management national programme.
- The decision made by EEAE to award scholarships through its Special Research Fund Account for postgraduate studies abroad to obtain a master's or doctoral degree in subjects such as nuclear technology, radiological protection and nuclear safety and security, i.e. relevant to research and development related to SF & RW management.

Areas of improvement

The following areas have been considered by Greece to be improved in the future:

- to update the national policy and strategy for SF&RW to address the ARTEMIS findings;

- to improve the EEAE communication strategy so as to include all stakeholders in decision making regarding issues related to RW.

Major Challenges

- to finalize the procedures for the siting of the disposal facility: this issue has been partially addressed since the previous review meeting;
- to establish a waste management organization (WMO) in a timeframe suitable to carry out the necessary activities foreseen in the national programme.

International peer reviews

- The ARTEMIS mission was successfully completed in September 2023, as scheduled. The ARTEMIS review team identified recommendations and suggestions to improve the management of radioactive waste in Greece, including, among others:
 - The Government should develop a process for the inclusion of all interested parties in decision making for the site selection of disposal facilities prior to the issuance of the feasibility license.
 - NCSR “D” should take measures to ensure the retention of knowledge and information and provide human resources with sufficient expertise, training and skills to implement actions in the national programme.
 - EEAE should consider strengthening the national inventory so that it covers all radioactive waste in Greece together with waste anticipated to arise in the future.
- The report of the mission is publicly available.

Openness and transparency

EEAE policy regarding information dissemination is based on the principles of transparency and openness, both towards interested parties and the general public; public information activities are based on a graded approach, taking into consideration the risk involved.

Within its integrated management system EEAE has established communication mechanisms, in order to inform interested parties about its decisions and actions. These mechanisms include:

- official letters to interested parties;
- contacts with representatives of professional unions;
- public consultation process;
- issuing of press releases;
- media relations;
- broad distribution of annual reports;
- uploading of national reports at EEAE website: CNS reports, Joint Convention reports, NSD reports, Radioactive-Waste-Directive reports;
- announcements at EEAE website;
- social media accounts (Facebook, Twitter, Instagram);
- preparation and distribution of information material;
- organization of seminars, workshops, events.

The language mainly used for all kinds of information activities is Greek. However, information is also available in English, since:

- part of EEAE webpage is available both in Greek and English version;
- several information leaflets, including the Annual Report, are also issued in English version;
- announcements via Twitter are often made in both languages.

EEAE notifies the interested parties and the public about the principles and criteria for safety used as the basis for the relevant regulations and guides and makes them available upon request. The safety criteria are available to the public or to whom may be interested, since these documents constitute "public documents". Moreover, a list of the legislative acts is available at EEAE website. Furthermore, EEAE website is designed in such a way to facilitate the interested parties familiarize themselves easily with the licensing procedure and system, the templates to be used, the reports to be submitted and all the relevant information.

In case of new guidance issued by EEAE, this is made widely known by EEAE via:

- official notification of professional associations;
- correspondence with the contact persons at the concerned facilities (e.g. nuclear medicine laboratories);
- organization of information events.

In general, EEAE website is a useful tool for public information and includes: data from the telemetric monitoring stations; data on medical radiation laboratories and reports, such as annual activity reports, radiological incidents reports, external evaluation reports (e.g. ARTEMIS mission report), reports submitted to IAEA (CNS, Joint Convention), licensing documents, etc.

SECTION L.

Annexes

Annex I: Inventory of radioactive waste

	DRWIS		GRR-1		Decommissioning GRR-1		Total NCSR "D"	
	m ³	MBq	m ³	MBq	m ³	MBq	m ³	MBq
VLLW	12,8	26			14,44	*	27,24	26
VLLW (Liquid)					0,6	*	0,6	*
LLW	3	139	0,2	0,3	0,46	*	3,48	139,3
ILW	0,01	10.000			0,92	700.000	0,93	710.000
Legacy (objects in 153 drums)	25	1.106**					25	1.106
Legacy (objects in 50 drums)			10	1.000			10	1.000
Legacy (cemented sludge in 57 drums)	4,84	60					4,84	60
Graphite waste					5,6	*	5,6	*
Contaminated Soil Pu	0,3	*					0,3	*
Contaminated plates with Pu			0,01	*			0,01	*
Metallic waste			9	*			9	*
Consumer Products (lightning rods)	0,4	8.000					0,4	8.000
Consumer Products (smoke detectors)	0,2	405					0,2	405
Consumer Products (Vehicle Instr., Lamps, depU blocks)	0,5	500					0,5	500
TOTAL NCSR	47,05	10.236	37,03	1.620,3	22,02		88,1	

* to be defined

** based on external dose surveys- characterization is in progress (RRF project)

Other facilities

	m ³	MBq
Contaminated Ash	75	10.000
Objects contaminated with NORM	160	2.500
Consumer Products (lightning rods)	1,9	28.300
Consumer Products (lightning rods, future arisings)	3,3	50.500
TOTAL OTHER FACILITIES	240,2	

Disused sources (DSRS)

	DRWIS	Facilities
	Number of DSRS	
Category 1		2
Category 2	1	4
Category 3	3	7

Annex II: Overview matrix

Type of Liability	Long term management policy	Funding of Liabilities	Current practice/ Facilities	Planned facilities
Spent Fuel	N/A	N/A	N/A	N/A
Nuclear Fuel Cycle Waste	N/A	N/A	N/A	N/A
Non-power waste	Disposal.	Licensee, Government	On site storage, decay and release for short lived waste. Longer lived waste are stored until final management solution	Near surface disposal facility with engineered barriers (vault) is being investigated
Decommissioning Liabilities	Decommissioning waste stream included in the national program waste streams.	Licensee, Government	Decommissioning plan is required in the national regulatory framework	GRR-1
Disused Sealed Sources	Return to the manufacturer. Recycling. Disposal	Licensee, Government	Return to the manufacturer. Exported to be recycled. Interim storage	None
Mining & Milling waste	N/A	N/A	N/A	N/A

List of abbreviations

ADKEA	Assessment of nuclear and radiation related threads
DRWIS	NCSR “D” Radioactive Waste Interim Storage facility
EEAE	Greek Atomic Energy Commission
ESARPEA	Special Response Plans in Case of a Radiological or Nuclear Emergency
EW	Exempted Waste
GCPP	General Civil Protection, <i>Emergency</i> , Plan
GSCP	General Secretariat of Civil Protection
GRR-1	Greek Research Reactor 1. The only one research reactor in Greece, owned by NCSR “D”
ILW	Intermediate Level Waste
LLW	Low Level Waste
MD	Ministerial Decision
NCSR “D”	National Center for Scientific Research “Demokritos”
PD	Presidential Decree
RW	Radioactive Waste
SF&RW	Spent Fuel and Radioactive Waste
VLLW	Very Low Level Waste
VSLW	Very Short Lived Waste

GREEK ATOMIC ENERGY COMMISSION

P.O. Box 60092, Agia Paraskevi,

Postal Code 15341 Athens

T: + 30 210 650 6700

E-mail: info@eeae.gr

www.eeae.gr