Luxembourg


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This report was produced by the Directorate of Health, Department of Radiation Protection (DRP) of the Ministry of Health on behalf of the Government of Luxembourg
## List of Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ARTEMIS</td>
<td>Integrated review service for radioactive waste and spent fuel management, decommissioning and remediation programmes;</td>
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<tr>
<td>CNS</td>
<td>Convention on Nuclear Safety;</td>
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<td>DRP</td>
<td>Department of Radiation Protection within the Directorate of Health (Competent Regulatory Authority);</td>
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<tr>
<td>EDF</td>
<td>Electricité de France;</td>
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<tr>
<td>CNS</td>
<td>Convention on Nuclear Safety;</td>
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<td>ENSREG</td>
<td>European Nuclear Safety Regulators Group;</td>
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<td>ENSTTI</td>
<td>European Nuclear Safety Training and Tutoring Institute;</td>
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<tr>
<td>EP&amp;R</td>
<td>Emergency Preparedness and Response;</td>
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<td>EU</td>
<td>European Union;</td>
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<td>EU-BSS</td>
<td>EU Council directive laying down basic safety standards for protection against the dangers arising from exposure to ionizing radiation;</td>
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<td>HERCA</td>
<td>Heads of the European Radiological protection Competent Authorities;</td>
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<td>NEA</td>
<td>Nuclear Energy Agency;</td>
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<td>IAEA</td>
<td>International Atomic Energy Agency;</td>
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<tr>
<td>IRRS</td>
<td>Integrated Regulatory Review Service;</td>
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<tr>
<td>RB</td>
<td>Competent Regulatory Authority</td>
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<tr>
<td>RPO</td>
<td>Radiation Protection Officer;</td>
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<tr>
<td>TSO</td>
<td>Technical Support Organization;</td>
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<tr>
<td>WENRA</td>
<td>Western European Nuclear Regulators Association;</td>
</tr>
</tbody>
</table>
# Table of Contents

- **LIST OF ACRONYMS AND ABBREVIATIONS** ........................................ 2
- **TABLE OF CONTENTS** ........................................................................ 3
- **A - INTRODUCTION** ........................................................................... 4
- **B - REPORTING ARTICLE BY ARTICLE** .......................................... 5
  - ARTICLE 4, LEGISLATIVE, REGULATORY AND ORGANISATIONAL FRAMEWORK ........................................ 5
  - ARTICLE 5, COMPETENT REGULATORY AUTHORITY ........................................ 9
  - ARTICLE 6, LICENSE HOLDERS ......................................................... 12
  - ARTICLE 7, EXPERTISE AND SKILLS IN NUCLEAR SAFETY ........................................ 13
  - ARTICLE 8 – TRANSPARENCY ......................................................... 14
  - ARTICLE 8E – PEER REVIEWS ......................................................... 16
- **APPENDIX – LAWS, REGULATORY ACTS AND DEGREES** ............... 18
A - Introduction

No nuclear power plant, no other fuel-cycle facility, no research reactor and no other nuclear installation is operated or planned in Luxembourg. In its immediate vicinity, at only 8.5 km south from the national border EDF operates the French NPP “Cattenom” comprising four 1300-MWe reactors. A second French site, Chooz with two times 1450 MWe output is located at around 70 km west from Luxembourg and the three reactors (3 x 930 MWe) at Tihange in Belgium have a distance of 65 km north-west from the closest border point. The closest German NPPs, Biblis (shutdown since March 2011 under the German phase-out policy) and Philipsburg, are situated at around 150 km east of Luxembourg. Other operating NPPs, like Doel (Belgium), Fessenheim and Nogent-sur-Seine (France), Borsele (Netherlands) and Neckarwestheim (Germany) are at distances between 150 and 250 km.

Figure 1: Situation of Luxembourg. The image indicates the location of the 3 closest NPP’s in France and Belgium, respectively. The red dots on the map show locations where automatic radiation monitoring stations are installed.

These national circumstances were taken into account for the development of the appropriate national framework. The department of radiation protection (DRP) within the Directorate of Health of the Ministry of Health is the acting regulatory body charged with the protection of the population against the hazards of ionizing and non-ionizing radiation, as well as with nuclear safety.


- 4 -
B - Reporting article by article

Article 4. Legislative, regulatory and organisational framework

Luxembourg has updated its legal framework with regard to radiation protection, nuclear safety and radioactive waste management. The new law of 28th May 2019 on radiation protection enters into force on 1st August 2019. It is the result of the transposition of the EU-BSS directive. It repeals and replaces the former legal framework on those matters, namely the Act from 1963. On 1st of August 2019, the new regulation on radiation protection enters into force. It contains the executive provisions and more detailed criteria.

The main aspects from the previous framework have been maintained and strengthened. The new law mainly ensures to:

- Modernize the national legislative framework for the control and monitoring of practices that use radiation sources, for example in nuclear medicine departments. The level of control takes into account a graduated approach.
- Simplify the administrative procedures for low-risk equipment, such as baggage screening scanners. For all these practices, the law establishes a system of authorization, inspections and sanctions by the regulatory body.
- Define conditions relating, in particular, to the training and continuing education necessary for the exercise of a practice, the compulsory consultation of experts, the individual protection of workers and the information of workers on the potential risks. Concerning the experts, the law creates the new professions of expert in medical physics and expert in radioprotection.
- Specify the responsibilities of the requesting physician and the medical director in the field of medical exposures so as to ensure for the protection of patients the optimization and justification of any act of nuclear medicine and radiology.
- Broader the scope of the law to include exposure from natural sources of radiation, including the protection of aircrews from cosmic radiation, radon exposure in dwellings and workplaces, exposure from building materials and protection of workers from naturally radioactive materials.
- Clarify the responsibilities and criteria for the protection of the population in order to cope with the possibility of a nuclear or radiological accident. In this area, it strengthens the implementation of the emergency response plan.
- Establish closer collaboration between Member States and to ensure participation in international peer reviews concerning nuclear safety.
- Clarify the regulatory competences concerning the physical protection of all types of radioactive material.
- Forbid some practices, such as the construction and operation of nuclear installation, as well as the use of nuclear material above 1 kilogram.

The law of 21 November 1980 concerning the organization of the Directorate of Health establishes the regulatory body by attributing the competences concerning the protection against all hazards of ionizing and non-ionizing radiation, as well as nuclear safety to the department of radiation protection (DRP).

Luxembourg, as a non-nuclear country, does not dispose of a very detailed set of regulations, decrees or ordinances on nuclear safety matters. In particular, aspects related to the operation or decommissioning of nuclear installations are not addressed. Luxembourg ratified all international conventions relevant to nuclear safety and concluded several bilateral agreements.
A list of all relevant acts, including the ratification of international instruments and other official agreements is given in the appendix.

Allocation of the responsibilities concerning the adoption of national nuclear safety requirements

The initiative for any legislative act or its amendment lies either within the parliament or at the competent Minister. It is worth to mention that the parliament has used its right for initiative only in few cases. It never did so in the area of nuclear safety or radiation protection. Over the last 20 years, the incentive for changing the national framework concerning nuclear safety and radiation protection came in all cases from a EU council directive with the obligation to be transposed into national law.

In practice, the DRP is at the technical level in charge with the preparation of draft text for those laws and regulatory acts. These drafts are then submitted to the department of legal affairs of the Ministry of Health for legal revision and the coordination of the legislative procedure. In case of a regulatory act, the draft is as a first formal step submitted to different institutions, such as the Chamber of Commerce and other relevant Ministries for opinion. Taking those opinions into consideration, the text of the proposed regulatory act goes through approbation by the Council of the Government and subsequently to the Council of State (Conseil d’Etat) for opinion. In case of a positive opinion, the responsible Ministers and the Grand Duke may adopt it by signature. It enters into force after publication or on a specific date specified within the regulation. The Ministers who signed the regulation are responsible, everyone within his field of competence, for execution.

Draft laws are discussed and may be amended after the opinion of the Council of State in the parliamentarian commission before its adoption through the parliament. The adoption comprises a first and second vote. Ministerial decrees are just signed by the competent Minister.

Technical requirements for radiological installations are mostly issued as license conditions by the DRP (see also “Regulatory Decision Taking” on page 10).

Overview of the licensing system

In law of 28th May 2019 on radiation protection articles 40 to 43 classify the types of facilities according to a graded approach. Article 44 defines the licensing regime for types of facilities. Article 45 defines the licensing conditions.

The types of classes are as follows:

- Class I facilities comprise facilities operating accelerators, X-ray generators used for sterilization, radioactive sources of IAEA category I, producers of radioactive sources, radioactive waste treatment facilities and radiotherapy facilities;
- Class II is dedicated to facilities using or holding radioactive substances exceeding by a factor of thousand the exemption limits as fixed by the Council Directive 2013/59/EURATOM, facilities engaged in industrial radiography or interim storage of radioactive waste or involving medical exposures, with the exception of dental X-ray equipment that does not have a three-dimensional imaging technique;
- Class III is dedicated to facilities using or holding radioactive substances exceeding the exemption limits as fixed by the Council Directive 2013/59/EURATOM, facilities operating X-ray machines or other electron-accelerating apparatus above 30 kilovolts, facilities where natural radioactive substances are used or held if the concentration of activity is greater than or equal to 100 Bq per gram.
Licenses are issued for a timespan ranging between 1 and 10 years and then need to be subject of a renewal procedure. Any project modifying the object or conditions of the license must be submitted for licensing following the procedure established for the class to which the establishment would belong after modification.

As mentioned earlier, major change in this new law is the general prohibition of nuclear installations. In order to avoid the elaboration of a complete legislative framework for an industrial sector that does not exist and is not foreseen in the future, the construction and operation of nuclear installation (enrichment plant, nuclear fuel manufacturing plant, nuclear power plant, research reactor, installation for processing, warehousing or storage of spent nuclear fuel) have been prohibited (Article 35). Therefor, the legal framework does not contain specific national nuclear safety requirements and a licensing procedure for nuclear installation. Article 149 defines the sanctions against anyone not respecting the prohibition concerning the construction and operation of a nuclear installation.

Overview of the regulatory control

The legal basis for inspections is laid down Article 147 of the law of 28th May 2019 on radiation protection, which appoints officers of the DRP to perform inspections. The inspectors are entitled to access facilities during office hours, take samples for examination, to obtain relevant documents and to collect on the spot any necessary information.

An inspection program including guidelines supports the inspection process has been put in place. The program includes guidelines, procedures and checklists to ensure that all inspections follow the same standards. The program also defines the different inspection types.

According to §5 of the above article, the inspection report is sent to the head of the facility and, if applicable, to the employer of the external worker. The report contains observations, records non-compliances and may give a deadline for remediation. In case of a more severe or safety significant non-compliance, enforcement actions are taken (see below).

Overview of the enforcement actions

With the introduction of the law of 28th May 2019, enforcement powers of the regulatory body are notably strengthened and a more graduated approach is introduced.

Article 148 introduces administrative measures that entitle the Minister of Health to suspend or revoke, partially or completely the license, respectively to suspend or stop a non-licensed activity.

Article 149 defines the penal sanctions. Officers of the DRP have the legal powers of police officers, entitling them to seize objects, documents and effects that were used to commit, or intended to commit, the offenses and to refer directly to the prosecutor. In such a case the DRP officers works under the authority of the prosecutor and must not be influenced, neither by any other body nor by his internal hierarchy.

Overview of the measures to maintain and improve the national framework

In order to assure that the national framework for nuclear safety remains effective and is not negatively affected by changes, e.g. in the national government structure, the regular conduct of a self assessment and a peer review as part of the Convention on Nuclear Safety (CNS) play an important role. The nuclear safety directive has strengthened this mechanism (see also IRRS mission under Article 9).
Above, Luxembourg has decided during the transposition of the directive on nuclear safety to enhance the mechanisms for regularly testing and reviewing the effectiveness of the national nuclear emergency plan. In particular an obligation has been introduced for the DRP to regularly assess the emergency plan, e.g. after exercises, and to propose enhancements, if needed. This provision responds partially to articles 1(a) and 4§2, related to the continuous improvement. It was also felt that, introducing the obligation to publish the results of internal assessments, would be a way to stimulate political decision takers when needed and to allow for a small country without nuclear installation to transpose the spirit of the directive in this area.
Article 5. Competent regulatory authority

Establishment of the competent regulatory authority

The executive competence in the field of nuclear safety and radiation protection is attributed to the Minister of Health. The law of 21 November 1980 concerning the organization of the Directorate of Health defines a department of radiation protection (DRP) and allocates particular missions. Similarly to a number of other small countries, the DRP centralizes as a single department all competence of radiation and nuclear safety, both the regulatory and the technical expertise aspects. For instance, the national laboratory for radiation physics is part of the DRP.

Article 137 of the law of 28th May 2019 defines the missions of the DRP with regard to nuclear safety as follows:

- a) to ensure constant monitoring of nuclear safety, taking into account international developments;
- b) to provide information to the public on the normal operating conditions of nuclear installations;
- c) to engage in cooperation activities on the nuclear safety of nuclear installations with the competent regulatory authorities of neighbouring countries operating a nuclear installation near the territory of the Grand Duchy of Luxembourg and to establish direct exchanges with the operators of these nuclear installations;
- d) to draw up reasoned opinions on the safety of nuclear installations;
- e) to encourage a culture and a high level of safety in the negotiations referred to in point f);
- f) to participate in the definition of national nuclear safety and radiation protection requirements and to be heard in its opinion for any decision taken on the basis of the law of 28th May 2019;
- g) to arrange for education and training for its personnel responsible for nuclear safety of nuclear installations in order to acquire, maintain and develop all the necessary skills and qualifications in nuclear safety.

In the event of an emergency exposure situation, the DRP is in charge with:

- a) analysing the extent and evolution of radioactivity in the environment and its impact on the population;
- b) proposing the delimitation of the perimeters concerned;
- c) setting up an exposure monitoring system;
- d) recommending protective measures.

Functional Separation

The DRP is a department within the Directorate of Health. The DRP reports via the Director of Health to the Minister of Health. The Ministry of Health is not involved in any energy policy activities, which fall under the competence of the Directorate of Energy of the Minister of Economy. This builds an effective and functional separation between the functions of the DRP and those of any other body or organization concerned with the potential promotion or utilization of nuclear energy.

The DRP does produce annual reports on its activities. Those reports are addressed to the parliament. The DRP also prepares draft answers to parliamentarian questions in the area of nuclear safety and radiation protection.
Regulatory decision taking

Concerning regulatory decision taking, the DRP defines licensing conditions. The licenses are signed by the Minister of Health. The licensing conditions set up by the DRP are legally speaking only an advice. They become applicable by the signature of the minister. This situation has been one of the top issues highlighted during the IRRS mission. Even, if in reality the Ministry has never altered license conditions proposed by the DRP in substance, the IRRS team concluded that the DRP should increase its independence in that matter. One possibility discussed would be a delegation of signature to the DRP concerning all decisions to be taken in the frame of the radiation protection law. This discussion is part of the implementation of the IRRS action plan.

Financial resources

All activities and projects of the DRP are financed via state budget, allocating predefined credits on a yearly basis. Some of these credits are non-limited to allow covering non-predicable costs when circumstances make it necessary. This applies for example to expenses resulting from accidents and incidents. The budget of the DRP has over the last years been increased at a yearly rate between 2 and 4% in conjunction with the economic growth. The DRP has responsibility in the implementation of the allocated budget.

Human resources

The DRP is composed of 9 agents with master degree, including 4 with PhD, specialized in radiation protection (1), medical physics experts (2), nuclear physics and engineering (2), physics (1), geology (1), biology (1) and chemistry (1). The permanent staff of the DRP is further composed of one bachelor engineer, 4 technicians, and a secretary.

The facilities that exist in Luxembourg do in most cases not require any competence that is not available within the DRP. Above, a specific unlimited budgetary article allows the DRP in well-justified cases to engage external technical support. This was used in the past in the frame of specific licensing procedures, involving a TSO of a neighbouring country. It is also used to acquire an independent technical view on nuclear projects in the vicinity of Luxembourg’s national borders (e.g. Stress-test or the French project for a geological repository of high-level radioactive waste).

Procedures for the prevention and resolution of any conflicts of interest

The amended law of April 16, 1979 establishing the general status of state officials, Articles 14 and 15 contain provisions relating to the prevention and resolution of any conflict of interest.

Openness on nuclear safety-related information without clearance from any other body or organisation

Article 144 of the law of 28th May 2019 is dedicated to the transparency. It states that the regulatory body shall ensure that information concerning the justification of practices and the regulation of sources of ionizing radiation and radiation protection is made available to establishments, workers, members of the public and patients exposed to medical exposure. It shall further inform the public in the areas of its competence.

Participation in the definition of national nuclear safety requirements

As stated earlier, the DRP is at the technical level in charge with the preparation of draft text for laws and regulatory acts concerning radiation protection and nuclear safety. During
discussions of such draft laws in the parliament commission, an expert of the DRP is always present and consulted as appropriate (see also on pages 6 and 8).

Powers to require that the licence holder complies and demonstrates compliance with national nuclear safety requirements, to verify such compliance through regulatory assessments and inspections, and propose or carry out effective and proportionate enforcement actions.

The powers of the DRP are highlighted on page 7.
Article 6 - License holders

Notwithstanding the fact that Article 6 is not applicable to Luxembourg, some general information is given with regard to the prime responsibility of license holders. Article 4 of the law of 8th May 2019 defines the license holder as a moral or physical person having the legal responsibility for a radiological practice. The various provisions of the law ensure the attribution of the responsibility to the license holder concerning notably the following:

- Requesting licensing prior to installation and operation of a radiological equipment (Articles 44);
- Radiological safety of the workers (Article 61);
- Radiological safety of the patients (Article 87);
- On-site emergency preparedness arrangements (Article 110);
- Radiological Safety of the public (Article 112);
- Safe management of radioactive sources (Article 130).
Article 7 - Expertise and skills in nuclear safety

The modified law of 16 April 1979 on civil service and its executive decrees define minimum education requirements for entering the different civil servant careers. Concerning the nuclear engineers and the expert of radiation protection of the DRP a master diploma in physics or nuclear engineering and a 2 years post-university specialisation in the fields of radiation protection or nuclear safety are requested.

Article 137 of the law of 28th May 2019 is dedicated to competence maintenance in the area for nuclear safety. Accordingly, the DRP is obliged among others to follow-up international developments, to contribute to the international safety regime and to take steps for the training of its own staff. The principle of active international cooperation is also included in article 116 concerning EP&R.

The DRP uses the training offers provided by the national institute of public administration to all public administrations in Luxembourg. Their offer includes standard training (such as management) and specific trainings on demand, such as a training session on laboratory accreditation and the ISO Norm 17025. All agents of the DRP are encouraged to set up an own multiannual training program and to schedule 1 to 2 weeks per year either training, participation in seminars or exchanges with homologue organizations. DRP agents have participated in international training sessions, such as the Basic Training Program for Analyst in Nuclear & Radiation Safety of ENSTTI and on International Law offered by the NEA.

Another important factor of maintaining competence in the nuclear safety domain is the active involvement in international activities. The professional exchange in meetings, such as the CNS-review meetings, ENSREG, WENRA and HERCA is highly beneficial for a small body like the DRP.

The present report does not include arrangements for training and education requested from license holders in the non-nuclear sector, radiation protection experts, medical physics experts, radiographers and others.
**Article 8 – Transparency**

The legal reference regarding openness on nuclear safety-related information is provided on page 10 of the present report.

On the webpage [www.radioprotection.lu](http://www.radioprotection.lu) relevant information is provided on all aspects related to the missions of the DRP, such as legislation, explanations and guides for RPO’s, specific reports, results of the environmental monitoring and information for the public on emergency preparedness. The homepage is up-dated and expanded at regular intervals by the DRP. So far only a French version exists, though some of the documents, such as the national reports to the CNS, may be provided in other languages.

With the adoption of the latest nuclear emergency plan in 2014, the government has organized an information campaign consisting of the following main elements:

- Establishment of a crisis information website (www.infocrise.lu) to provide information on nuclear emergencies and presents all the information on radioactivity in general and the nuclear sites located close to the Grand Duchy of Luxembourg in German, French and English. While the site was launched with regards to a nuclear emergency, the site now also provides information on other potential crisis situations.
- Publication of a new brochure “What to do in the event of a nuclear alert” to inform the population, raise their awareness and prepare them for such an eventuality. The brochure exists as hard copy in German, French, Luxembourgish and English. It can additionally be downloaded in Portuguese and in a version of Easy Read German. The brochure is also available in Braille and in an audio version.
- Establishment of an office for crisis communication. This office, equipped with permanent staff is charged to update all available information and to organize communication during a crisis by making use of modern network communication platforms.

With regard to the implementation of the ENSREG Guidance on Openness and Transparency for European Nuclear Safety Regulators, the situation is as follows:

- A culture of openness within the regulatory body is promoted through its senior staff;
- To date, the DRP has not set up a policy or strategy on communication. Decisions regarding communication are taken ad hoc.
- As highlighted above a dedicated website is used to communicate with the public and other interested parties. It contains access to on-line radioactivity monitoring data, to the relevant guidelines and legislation, to information on specific events and incidents, to research and other reports and to press releases. Above [www.Guichet.lu](http://www.Guichet.lu) is an information portal that simplifies exchanges with the State and offers access to administrative procedures with the DRP.
- The annual report of the DRP is included into the annual report of the Ministry of Health and published on the website of the Government.
- The DRP involves stakeholders (e.g.: from hospitals and medical physicists) when drafting procedures and guidelines. Public meetings are held on ad hoc basis. Recent public meetings were related to the implementation of the national radon action plan.
- The DRP regularly works with the press office of the Ministry of Health concerning the communication with the media.
- With regard to EP&R information has been targeted to different user groups, using several languages and also specific language for disabled persons.
• Concerning the type of facilities using radiation sources, there is not a lot of security sensitive information. All reports produced by the DRP are indeed produced with the aim to enable their publication.
• So, far, the DRP has never evaluated its effectiveness in communication.

The present report does not include information on Articles 8a, 8b, 8c and 8d, since these articles do not apply to Luxembourg.
Article 8e – Peer Reviews

Articles 138 of the law of 28th May 2019 provide for the Directorate of Health to arrange for periodic self-assessments, at least once every 10 years, to assess whether it has the legal competences, qualifications and the human and financial resources necessary to fulfil the tasks assigned to it by the above law. According to Article 139, the Directorate of Health submits at least every ten years the relevant elements of its missions, its organizational structure and the provisions of the law of 28th May 2019 and the law of 21 November 1980 on the organization of the Directorate of Health to an international examination to be carried out by peers in order to constantly improve nuclear safety, radiation protection and the management of radioactive waste.

The results of any peer review are published and communicated to the Member States and the European Commission when they are available. The law further encourages radiation protection experts and nuclear engineers from the Directorate of Health to participate in international peer reviews in other countries.

Luxembourg’s first IRRS mission has taken place in June 2018. The 10 member IRRS-team reviewed during 10 days models 1 to 10, as well as the areas of occupational radiation protection, patient protection, transport and the safety/security interface. The policy discussions were held on the “Relation between Regulatory Body and Licensee” and the “Graded approach in the context of a small country”. The review gave rise to 24 recommendations, 7 suggestions and 3 Good Practices.

The main recommendations and suggestions for improvements concern the following aspects:

- establishment of a national policy and strategy for safety;
- definition of functions and responsibilities of the regulatory body within the legal framework and the establishment of mechanisms to ensure its effective independence;
- authority of the regulatory body to issue technical requirements and guidance for implementation of regulations;
- building and maintaining the competence and for the recognition of qualification for safety.
- integrated management system, including a policy document, human resources plan, technical guides, processes and procedures;
- formalizing interactions with authorized parties in carrying out its regulatory functions and responsibilities;
- implementation of an inspection program for all facilities and activities.

Additionally, an ARTEMIS mission has taken place in September 2018. The final reports and the action plan for the Implementation of the IRRS and ARTEMIS Recommendations and Suggestions have been published on the website of the DRP.

Concerning the topical peer reviews, Article 140 of the law of 28th May 2019 charges the Directorate of Health to participate, on a coordinated basis:

a) in defining the specific theme and scope of the examination;

b) the collective peer review of national assessments;

c) the proposal of appropriate measures to follow up on the relevant conclusions drawn from the peer review process.

d) to ensure that arrangements are made for a thematic peer review to take place at least every six years.
The law further provides that in the event of an accident leading to situations which would require off-site emergency response measures or measures to protect the population, the Directorate of Health arranges for an international examination by peers without undue delay.
Appendix – Laws, regulatory acts and degrees

- Law of 16 April 1979 establishing the general status of state officials.
- Law of 28 March 1984 concerning the approbation of the agreement between the government of the Grand Duchy of Luxembourg and the government of the French Republic concerning the information exchange in case of an incident or accident which might have radiological consequences, signed in Luxembourg on 11 April 1983.
- Law of 27 April 2006 concerning the approbation of the agreement between the government of the Grand Duchy of Luxembourg and the government of the Kingdom of Belgium concerning the information exchange in case of an incident or accident which might have radiological consequences, signed in Eischen on 28 April 2004.
- Grand-ducal regulation of 27 November 1987 concerning the admissible levels of radioactivity in foodstuffs.
- Grand-ducal regulation of 11 August 1996 concerning the provision of information to the population on the applicable measures for the protection of public health and on the conduct to be adopted in the event of a radiological emergency.
- Grand-ducal regulation of 6 May 2010, defining the specific missions, the composition, organization and operation of the department of civil protection of the rescue services agency.
- Grand-ducal regulation of 1st August 2019 on radiation protection.
- National emergency response plan in case of an incident or accident in the nuclear power plant of Cattenom or in case of any other radiological or nuclear event. (adopted by the Government on 2 December 1994).
- Agreement of 14 May 2013 between the Minister of Health, Luxembourg in the name of the Government of the Grand Duchy of Luxembourg and the Minister of Interior, Belgium in the name of the Government of the Kingdom of Belgium on the organization of the bilateral cooperation on nuclear safety matters and radiation protection.