Luxembourg

National Report on the measures taken by Luxembourg to fulfill the obligations laid down in the:

"Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management"

2006

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Section A : Introduction

Luxembourg has signed the Joint Convention on 1st October 1997 and is a Party thereof since 19 November 2001. The Convention entered into force on 21 June 2001.

Luxembourg has no nuclear power plant, no other fuel-cycle facility, no research reactor and no other facility generating radioactive substances. Thus many requirements of the Joint Convention do not apply to Luxembourg. It further has no spent nuclear fuel and no high level radioactive waste on its territory.

There are other reasons which explain, why the actual total amount of radioactive waste, in form of disused sealed sources of low activity, is marginal:

- small size of the country;
- import license for a radioactive sealed source is only granted by the competent authority under the condition that the foreign supplier certifies taking back the disused radioactive source;
- import and installation of radioactive smoke detectors and of radioactive lightning conductors has been forbidden for many years;
- most of the old “historical” radioactive sealed sources have been returned to the country of origin or to a foreign waste management facility.

In Luxembourg radioactive waste is only arising from the use of radioactive sources in industry, medicine and to a small extent from the use in education and research. Its activity and its volume being very low, the Luxembourg Government takes the position that the option of a national management facility and of a final disposal facility would be unrealistic, because not at all commensurate. Therefore all disused sealed sources have to be returned to the country of origin and if this turns out to be impossible, to a foreign waste management facility.

Since 1967, Luxembourg has a legislation and a regulation on radiation protection, which cover all relevant nuclear and radiological safety issues. This regulation is revised periodically in order to be in conformity with the provisions of the Directives of the European Union of which Luxembourg is a Member State. The last revision of the national regulation entered into force in 2000.

The legal framework relates to the protection of the general population, to the protection of workers and to the protection of the environment from damage that may be caused by radioactive sources or radioactive waste.

The aim of this report is to demonstrate that Luxembourg meets its obligations of the Joint Convention. This demonstration is mainly based on the Luxembourg legislation and policy framework concerning the management, the control and the inspection of radioactive sources and radioactive waste held in the country.

The situation with regard to the obligations of the Convention has practically not changed since the first Review Meeting. For this reason duplications from the previous report could not be fully avoided. The present report focuses further on subjects addressed by written questions during the preparation of the last meeting.

The report is structured in conformity with the “Guidelines regarding the form and structure of national reports” issued by the IAEA on 1 July 2002 (INFCIRC/604). However the section concerning the safety of spent fuel management covering articles 4-10 of the Joint Convention is dropped, as it is not applicable to Luxembourg.

Section B: Policies and practices

Radioactive waste management policy

The Luxembourg policy of the radioactive waste management is dictated by the practical needs of the country. The low activity and volume of radioactive waste produced in the country are not justifying the implementation of a national final waste depository on the territory.

From the very beginning on (1967), the Luxembourg policy aimed to avoid the production of radioactive waste. This policy is mainly based on the following provisions:

- return of disused sealed sources to the foreign supplier;
- replacement of radioactive sources by non-radioactive alternatives if available;
- minimization of the production of waste by the user;
- storage of transition radioactive waste on the user's premises until decay.

This policy is translated in its national legislation, whose last revision was accomplished in 2000.

Concerning the small quantities of radioactive waste arising in Luxembourg, the Belgian government has exceptionally, and due to the small quantities, accepted to treat the waste coming from the Grand Duchy of Luxembourg, in Belgium. The national report of Belgium submitted for the first review meeting of the Joint Convention serves as legal bases for this bilateral arrangement.

Radioactive waste management practices

Facilities using radioactive substances exceeding the exclusion levels, must, according to the quantities involved, either grant for a license or notify in advance the competent authority. Facilities are fully responsible for the safety and the security of the radioactive sources they use and for the management of the radioactive waste resulting from this use.

These activities are covered by the current regulation on protection of the population against the hazards of ionizing radiation, the scope of which extends to the processing, handling, storage, elimination and disposal of radioactive waste.

Facilities for the processing, conditioning and storage of radioactive waste have been included in category II and require prior licensing. Applications must be made to the competent authority, namely the Minister of Health.

Sealed sources

The licensee must have a written commitment from the foreign supplier, where the latter agrees to take care of the source if disused. In line with the regulation in force, if it turns out that the supplier is unable to respect his commitment, e.g. in case of bankruptcy, the user or holder takes the necessary administrative steps to send his disused source to a foreign waste

management facility. This also applies to older sources not yet covered by these new regulatory provisions.

Unsealed sources

Unsealed sources are only used in nuclear medicine, radiotherapy or in biomedical laboratories, e.g. Ga-67, Sr-89, Y-90, Tc-99m, I-125, I-131, Gd-153, etc. Several research laboratories, mainly in the field of biomedical research also use small quantities of H-3, C-14, P-32, S-35 and I-125.

Waste resulting from these practices and containing short-lived radionuclides are stored on the user's premises until decay or until the activity of the waste decreased below the clearance levels as fixed by regulation for the unconditional release. Waste below clearance level may be treated the same way as conventional hospital waste.

The use of sources with long half-life (C-14 and H-3) has slightly increased since the last Review Meeting. However, the amount of H-3, resulting from medical use and research activities does still not exceed the clearance levels and can thus be cleared unconditioned. The annual quantities of liquid waste containing low concentrations of H-3, released into the environment are presently around 1 GBq. The use of C-14 has increased since beginning of 2005 up to several hundred Mega Becquerel per year. Thus the policy had to be changed. Waste containing C-14 is now stored on the users premises, until a transfer to a foreign waste management facility will be organized.

The license, authorizing these practices, specifies the procedures for adequately handling, controlling and minimizing the releases radioactive substances.

Detection of radioactive sources in metal scrap

All Luxembourg steel companies using metal scrap and partly also the aluminium industry using metal scrap are equipped with fixed portal monitoring systems to detect radioactive materials inside vehicles transporting scrap by road or by rail. In all cases these portal monitors consist of two large plastic scintillation detectors. The equipment used is commercially available and specially designed for the detection of radioactivity in scrap. On the only existing harbor in Luxembourg a commercially available crane monitoring system is used for the unloading of scrap from ships.

Over the last several years, the incidents of detection radioactive sources in metal scrap have significantly decreased. Thus during the running year 2005 only two incidents have occurred. In both cases metal scrap having a slight contamination by NORM was discovered. Procedures are established between the competent authority and the concerned companies for a safe management of these incidents.

Waste arising from disused consumer goods containing small amounts of radioactive substances

To minimize radioactive waste produced in Luxembourg, the use and installation of the below listed goods containing radioactive substances has consequently been prohibited over the

years. The waste arising from these products, is either returned to the supplier or prepared for being shipped to a foreign waste management facility:

- The installation of new ionizing chamber smoke detectors (ICSD) has been prohibited in 1994. As a consequence the number of ICSDs in use dropped from 150000 detectors in at that time to approximately 50000 detectors in 2005.
- In 1995, the competent authority has started a program to withdraw all radioactive lightning conductors in use. These radioactive lightning conductors were installed in the 60s and 70s without the required licenses. Currently only 6 lightning conductors still need to be removed from public houses.
- The production and import of thorium incandescent gas mantles are forbidden, since gas mantles without any radioactive substances are available with similar properties

Certain consumer goods as watches, compasses, fishing floats, etc, containing radio-luminescent paintings or other consumer goods containing radioactive substances, as technical porcelain, optical glasses, etc, are difficult to control for reason of the free circulation of goods within the European Union.

Categorization of radioactive waste

Since Luxembourg is not operating nuclear power plants or any other fuel-cycle facility, radioactive waste is classified by the half-life of the corresponding nuclides and whether the disused sources are sealed or unsealed. A classification system as recommended by the European Commission (Commission Recommendation 1999/669/EC, Euratom) is not used, as it presents no practical advantage for Luxembourg.

Section C: Scope of application (Article 3)

The present report applies to the safety of the management of radioactive waste resulting from civilian applications and containing artificial radionuclide exceeding the regulatory clearance levels for the unconditional release.

The present report also applies to waste that contains naturally occurring substances exceeding the regulatory clearance levels for the unconditional release. It does not apply to waste that contains naturally occurring substances that, at the time of production, were not considered by law as radioactive waste.

As Luxembourg has no nuclear fuel cycle, the present report does not apply to the safety of spent fuel management.

Section D: Inventories and lists

As a non-nuclear country Luxembourg is not operating and never operated a radioactive waste management facility.

However, the Radiation Protection Department of the Ministry of Health takes care of disused sealed sources for which a safe management may not be guaranteed. This mainly concerns radioactive lightening conductors, radioactive smoke detectors, radium sources, small amounts of uranium or thorium salts, etc.

The Radiation Protection Department of the Ministry of Health is further responsible for controls of sources, stored on the user's premises before being shipped to a foreign radioactive waste management facility.

The inventories of the radioactive waste stored on 1 September 2005 on the competent authority's premises and on the user's premises are listed in Annex I.

The Radiation Protection Division of the Ministry of Health is further responsible for the up-dating of the database of all radioactive sources hold in Luxembourg. The content of the database used is quite similar to the content of the standard record sheet as foreseen in the proposal for a Council Directive on the control of high activity sealed radioactive sources. The Luxembourg database applies however for all sources and not only for high activity sealed sources.

Section E: Legislative and regulatory system

Article 18: Implementing measures

In Luxembourg, regulation of radiological protection and nuclear energy is based on the Framework Act of 25 March 1963 on the Protection of the Public Against the Hazards of Ionising Radiation, which established general principles. These principles formed the basis for executive regulations, which were regularly amended in conformity with the EU directives on radiation protection. The last amendment of the regulation was put into force on 14 December 2000. The current regulation constitutes the basic text governing radiation protection in Luxembourg. This regulation was adopted to implement the Council Directive 96/29/Euratom of 13 May 1996 laying down basic standards for the health protection of the general public and workers against the dangers of ionizing radiation. The Luxembourg current regulation is complying with the provisions of the EU directives on radiation protection. Subsequently, all modifications of the common standards will lead to an adaptation of the national legislation. This is an ongoing process.

The current regulations apply to the production, manufacture, possession, sale, transit, transport, import, export, use for commercial, industrial, medical, scientific or other purposes, recycling and re-use of equipment or substances capable of emitting ionizing radiation. They also apply to the treatment, handling, storage, elimination and disposal of radioactive substances or waste and to any other activity involving a risk arising from ionizing radiation.

Article 19: Legislative and regulatory framework

Radiation Protection

The provisions relating to dose limits for the public and workers take into consideration the ALARA principle (As Low As Reasonably Achievable). Thus, the exposure of the public and

workers to ionizing radiation, where such exposure is controllable, must be kept as low as reasonably possible, as must be the number of persons and workers exposed to radiation.

The limit of the annual effective dose for exposed workers (including women of child-bearing age, apprentices and adult students) is fixed to 10 mSv. The working conditions for pregnant women have to guarantee, that the equivalent dose to the unborn child will not exceed 1 mSv. Nursing women are not allowed to work in conditions bearing high risks of contamination. For apprentices and students aged between 16 and 18 years who are obliged to use radioactive sources, the annual effective dose is fixed to 3 mSv. For members of the public and for apprentices and students below the age of 16 years, the maximum annual effective dose is fixed to 1 mSv.

The current regulation describes the operational rules to protect workers, outside workers, apprentices and students exposed to radiation. In particular, working areas are divided into "controlled areas" and "supervised areas" and workers are categorized. The regulations further impose a certain number of obligations, including the implementation of radiological monitoring of workers and workplace, as well as medical supervision, procedures regulating access to different areas, appropriate information of workers and training in the field of radiation protection.

The system of licensing and prohibition

In dependence of the accumulated activity of radioactive substances, facilities are ranged in four different categories, which imply different licensing procedures:

- Category I defines facilities of the nuclear fuel cycle, their decommissioning, radioactive waste management facilities and facilities for the final disposal of radioactive waste. Currently no undertaking of category I exists in Luxembourg.
- Category 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 96/29/EURATOM of 13 May 1996 or conditioning, respectively having an interim storage of radioactive waste.
- In Category III are ranged all facilities using or holding radioactive substances above the exemption limits fixed by the Council Directive 96/29/EURATOM of 13 May 1996, but not exceeding these levels by a thousand fold.
- In category IV are classified all facilities using or holding radioactive substances staying below the exemption limits fixed by the Council Directive 96/29/EURATOM of 13 May 1996 but exceeding 1/100 of these limits.

The regulation lays down separate licensing conditions for each category of installation, notably in relation to the technical information to be supplied, public information and participation in the licensing procedure. A prior license from the competent authorities is nevertheless required for categories I-III. Declaration is sufficient for category IV.

The Government in Council (category I), the Minister of Health (category II) and the Health Directorate (categories III and IV) are competent in authorizing facilities of the respective categories. Refusal is motivated. The Minister of Health may suspend or withdraw a license when the licensee contravenes the regulation in force or the conditions of the license.

Control, inspection and responsibilities

The control and inspection of radioactive sources and waste are a shared responsibility of the undertaking and the Radiation Protection Department of the Ministry of Health.

Before first use all source or equipment emitting ionizing radiation has to undergo an inspection by the Radiation Protection Department. The operational radiation protection system is also inspected. Furthermore, facilities holding and handling radioactive sources are monitored and inspected at regular intervals by the Radiation Protection Department. These periodic inspections may also cover leakage tests of sealed sources. Leakage tests of the sealed sources are mandatory in case of an incident involving the source and at latest when the source is 10 years in use. Facilities have to hold a register of all the sources used or stored on their premises with indicating their exact respective location.

The Radiation Protection Department is holding a national register of all the sources, devices, equipment and installations emitting ionizing radiation. It is further charged with controlling the facilities in respect to all regulatory provisions, such as taking all the appropriate measures to avert danger in case of an incident involving these sources, devices, equipment and installations. Agents of the Radiation Protection Department are further attributed with the legal power of police officers.

Article 20: Regulatory body

In Luxembourg, the legislative and executive competence in the field of radiological safety and radiation protection is attributed to the Minister of Health. The Minister of Health is responsible for enforcing radiation protection legislation. For this purpose, he closely supervises nuclear activities through licensing procedures enabling him to intervene extensively in the production and use of nuclear energy and radioactive material.

The Ministry of Health provides the necessary financial and human resources to assume its legal responsibilities. The Radiation Protection Department, placed under the authority of the Health Directorate of the Ministry of Health, is in charge of the operational and practical aspects. Its tasks include in particular:

- monitoring of radioactivity in the air, water, soil and food chain; studying of measures to be taken and the co-ordination of emergency assistance in the event of an accident;
- evaluation and monitoring of radiation doses received by occupationally exposed persons;
- holding a national register in form of a database of all radioactive sources and substances kept on the territory of Luxembourg;
- monitoring and regular verification of the effectiveness of radiation protection measures and techniques at places of work where there is a risk of exposure to ionizing radiation.

Section F: Other general safety provisions

Article 21: Responsibilities of the license holder

A license holder is fully responsible for the respect of all regulatory provisions concerning the safe management of their radioactive sources and if necessary interim storage of waste, as well as the organization of the shipment to a foreign waste management storage in accordance with the applicable regulations. They are further responsible in particular for:

- taking the appropriate steps to optimize all exposure to ionizing radiation;
- identifying all potential radiological risks incurred by the exposed workers;
- classifying the working places and to delineate controlled and supervised areas;
- supervision of the working conditions in the controlled and supervised areas;
- classifying the exposed workers and organizing the medical surveillance;
- implementing the individual monitoring and the monitoring of the working place if appropriate;
- working out written procedures and instructions for the exposed workers;
- appointing a qualified expert or assign persons responsible for the physical control, the safety and the security of the equipment, the radioactive sources and the radioactive waste;
- training the exposed workers on all relevant issues in radiation protection.

Article 22: Human and financial resources

By legislation, facilities using or holding radioactive sources or radioactive waste are bound to provide adequate human and financial resources to guarantee the safety and security of their sources and waste. They must contract a special insurance covering the reparation of radiological damage to third persons in case of an accident.

Article 23: Quality assurance

As Luxembourg is not operating a radioactive waste management facility, no specific quality assurance program exists. In other fields of operational radiation protection and survey of radioactive sources and substances quality assurance is well established.

Article 24: Operational radiation protection

The operational radiation protection is under the responsibility of the license holder as has earlier been described in detail.

Article 25: Emergency preparedness

Emergency preparedness and emergency response planning are a shared responsibility by the undertaking and by the competent authorities. As facilities are fully responsible for the safety of their radioactive sources and waste, they have to take the necessary steps to cope with radiological emergencies. Depending of the quantities of radioactive substances, they have to draw up internal emergency response plans taking into account the most probable accidents.

Periodic review of the plans and the training of the staff by organizing regular exercises are part of the conditions set in the license.

In case of an emergency, the license holder is obliged to notify immediately the competent authorities, to evaluate the possible radiological consequences for the populations at risk, to take the necessary steps to avoid or to stop the release of radioactivity in the environment and limiting by that the exposure of individuals and to respect the legal provisions in case of emergency exposures.

The Government has set up a national emergency response plan to alert and to protect the population in case of a radiological emergency. The Minister of Health and the Minister of Interior are responsible for the off-site emergency planning.

This national emergency intervention plan takes into consideration different aspects of emergency response, such as to alert of the population at risk, to determining the competence of the different authorities, intervention and rescue teams, to take the various preventive and protective counter-measures and to fix the different intervention levels.

The Civil Protection Department of the Ministry of Interior and the Radiation Protection Department of the Ministry of Health are responsible for the implementation of interventions and mainly for the environmental monitoring of the radioactivity dispersed, the evaluation of the radiological impact and the operational aspects of implementing countermeasures.

The Council Directive of 27 November 1989 on informing the general public about health protection measures to be applied and steps to be taken in the event of a radiological emergency was transposed into national legislation on 11 August 1996.

Bilateral agreements on mutual assistance have been concluded with Germany, France and Belgium. These general agreements also cover radiological and nuclear emergencies. A bilateral agreement on mutual early information has been concluded with France. Presently a similar agreement is also worked out with Belgium.

Article 26: Decommissioning

This article does not apply to Luxembourg.

Section G: Safety of Spent Fuel Management

This section is not applicable for Luxembourg.

Section H: Safety of Radioactive Waste Management

This section is not applicable, since Luxembourg is not operating a waste management facility.

Section I: Transboundary Movement

In Luxembourg, transport of radioactive material is under control of the competent authorities. The provisions of the ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Roads) and of RID (Regulation Concerning the International Carriage of Dangerous Goods by Rail) apply. Also the technical instructions of the ICAO and the Dangerous Goods Regulations of the International Air Transport Association (IATA) are applicable.

However Luxembourg deals with selected points of the international provisions more restrictive in authorizing transports. Thus prior licensing is above exemption level always requested. The authorization may be limited to a single transport operation or be valid for a limited time period of five years at maximum.

For the transfer of sources, the EU Council Regulation of 8 June 1993 on shipments of radioactive substances between Member States is applicable.

Concerning the transfer of radioactive waste, the Belgian government has exceptionally, and due to the small quantities, accepted to treat the waste coming from the Grand Duchy of Luxembourg, in Belgium. In order to organize a shipment the competent authority of Belgium has to agree and accept the waste. Before the transfer takes place, independent organisms check the shipments if they meet the requirements on international transport regulations. The licensee in Luxembourg has to meet all the requirements fixed by the competent authorities of both countries. Shipments must be carried out by carriers holding a transport license.

Council Directive 92/3/EURATOM of 3 February 1992 on the supervision and control of shipments of radioactive waste between Member States and into and out of the Community, the Commission Decision 93/552/EURATOM of 1 October 1993 establishing the standard document for the supervision and control of shipments of radioactive waste referred to in council Directive 92/3/EURATOM and Council Regulation 93/1493/EURATOM of 8 June 1993 on shipments of radioactive substances between Member States do apply.

The overall long-term radioactive waste management strategy will consist to avoid the production of waste by replacing as far as possible radioactive sources by non-radioactive alternatives. Some factors which have been described earlier help to implement this strategy.

Luxembourg industries also realized that transfers of disused radioactive sources to waste management facilities are highly expensive. For these reasons, most Luxembourg industries try to replace radioactive sources by non-radioactive alternatives. In the last years some industries managed to reduce the number of sources in use significantly or even to replace completely by over techniques. Nether the less increasing use of radioactive sources and substances has to be reported for the medical and research sector.

Section J: Disused sealed sources

Luxembourg took all necessary regulatory steps to guarantee the safe management of sealed sources. Safety and security of these sources are in particular guaranteed by licensing the source, arranging written consent of the supplier to take back the sources out of use, regular inspection

and controls, administrative support in transferring disused sources to the supplier or to a foreign waste management facility and finally by tracing all movements of the source within its lifetime.

Section K: Planned activities to improve safety

The very limited number of incidents involving radioactive sources that happened in the last decades demonstrates that the Luxembourg system of management of radioactive sources and waste guarantees a high level of safety.

A database has been created over the past two years, which contains all relevant information of all used and disused sources. This database allows an enhanced follow up of all sources. With the transposition of the Council Directive 2003/122/EURATOM of the 22 December 2003, Luxembourg will incorporate this database into its regulation. The provisions of the IAEA Code of Conduct on the Safety and Security of Radioactive Sources are equally considered.

According to the provisions of Council Regulation 93/1493 of 8 June 1993 on shipments of radioactive substances between Member States, the holder of a radioactive source who has carried out a shipment of such a source has to provide the competent authorities in the Member State of destination with the total activity per radionuclide delivered to each consignee and the numbers of deliveries made. However, mainly in the field of medical applications, not all holders from neighboring countries providing Luxembourg hospitals with radiopharmaceuticals do comply with the provisions with this Council Regulation. Luxembourg has to take the necessary administrative measures to strengthen the respect of the Council Regulation. The improvements that have been achieve since the last Review Meeting are unfortunately only marginal.

Annex I

Inventory of disused radioactive sources stored on 1st September 2005 on the users premises. Interim storage of radioactive waste with very short-lived radionuclides from medical origin is not taken into account.

Radionuclide	Number of sources	Total activity (GBq)
Am-241	6	131
Kr-85	8	177
Sr-90	21	22.4
Pm-147	2	148
Co-60	3	1.29
H-3	1	7.4
Cs-137	1	1.67
Total:	**42**	**488.76**

Inventory of disused radioactive sources stored on 1st September 2005 on the authority's premises. Divers radioactive salts and minerals containing NORM are not included.

Source type	Radionuclide	Number of sources	Total activity (GBq)
Lightening conductors	Am-241	60	0.67
Lightening conductors	Ra-226	6	0.19
ICSD's	Am-241	2208	0.69
ICSD's	Ra-226	260	0.001
Gaseous light sources	H-3	3	740
Industrial sources	Ni-63	2	0.67

Annex II

References to national and international laws, regulations, directives, decisions

Safety, radiation protection, operational radiation protection, licensing, emergency preparedness

Journal Officiel du Grand-Duché de Luxembourg
RECUEIL DE LEGISLATION
Memorial A - N° 18 10 avril 1963
Loi du 25 mars 1963 concernant la protection de la population contre les dangers résultant des radiations ionisantes (Law of 25 March 1964 concerning the protection of the population against the dangers arising from ionizing radiation).

Journal Officiel du Grand-Duché de Luxembourg
RECUEIL DE LEGISLATION
Memorial A - N° 9 22 janvier 2001
Règlement grand-ducal du 14 décembre 2000 concernant la protection de la population contre les dangers résultant des rayonnements ionisants. (Grand-ducal regulation of 14 December 2000 concerning the protection of the population against the dangers arising from ionizing radiation).

2003/122/EURATOM
Council Directive of 22 December 2003 on the control of high-activity sealed radioactive sources and orphan sources

96/29/EURATOM
Council Directive of 13 May 1996 laying down basic safety standards for the health protection of the general public and workers against the dangers of ionizing radiation.

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)

89/618/EURATOM
Council Directive of 27 November 1989 on informing the general public about health protection measures to be applied and steps to be taken in the event of a radiological emergency.

IAEA Code of Conduct on the Safety and Security of Radioactive Sources

Shipments of radioactive waste and substances

Journal Officiel du Grand-Duché de Luxembourg
RECUEIL DE LEGISLATION
Memorial A - N° 165 31 décembre 2001
Arrêté grand-ducal du 28 septembre 2001 portant publication de l'Accord européen relatif au

transport international des marchandises dangereuses par route (ADR), signé à Genève en date du 30 septembre 1957 et approuvé par la loi du 23 avril 1970, du protocole de signature et des annexes A et B, y compris les amendements en vigueur au 1er juillet 2001.

Journal Officiel du Grand-Duché de Luxembourg
RECUEIL DE LEGISLATION
Memorial A - N° 165 31 décembre 2001
Arrêté grand-ducal du 28 septembre 2001 portant publication du Règlement concernant le transport international ferroviaire des merchandises dangereuses (RID), annexe aux Règles uniformes CIM (Appendice B à la Convention relative au transports internationaux ferroviaires COTIF, signée à Berne, le 9 mai 1980 et approuvée par loi du 4 mai 1983, y compris les amendemants en vigueur au 1er juillet 2001.

92/3/EURATOM
Council Directive of 3 February 1992 on the supervision and control of shipments of radioactive waste between Member States and into and out of the Community.

94/C224/02
Communication concerning Council Directive 92/3/EURATOM.

93/552/EURATOM
Commission Decision of 1 October 1993 establishing the standard document for the supervision and control of shipments of radioactive waste referred to in council Directive 92/3/EURATOM.

93/1493/EURATOM
Regulation of 8 June 1993 on shipments of radioactive substances between Member States.

93/C335/02
Communication concerning Council Regulation (Euratom) No 1493/93.