

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

Report of the Republic of the Islamic Republic of Mauritania 2018/2019

SECTION A. Introduction

The legislative and regulatory framework for the control of radiation sources in Mauritania is set out in Law No. 2010-009 of 20 January 2010 on Nuclear Energy and its implementing Decree No. 2012-170 of 12 July 2012.

This law was drafted with the assistance of the IAEA in 2009. It provides for the creation of a regulatory body, the National Authority for Radiological Protection, Safety and Nuclear Security (ARSN), and defines its functions and responsibilities.

The Act also provides for all the principles and mechanisms necessary for an appropriate national regulatory infrastructure, in accordance with the publication.

The IAEA's "Legislative and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety" (IAEA Safety Standards Series, No. GS-R-1) and the Code of Conduct on the Safety and Security of Radioactive Sources.

Mauritania has expressed its political support:

- the Code of Conduct on the Safety and Security of Radioactive Sources
- the Supplementary Guidance on the Import and Export of Radioactive Sources.

The points of contact were also named. Mauritania has acceded to the following Conventions:

- Convention on Early Notification of a Nuclear Accident,
- Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency,
- Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.
- Ratification of the 2005 Protocol and the 1988 SUA Convention.
- Convention on the Physical Protection of Nuclear Material and its amendment
- Convention on Nuclear Terrorism

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- Vienna Convention on Civil Liability for Nuclear Damage,
- Non-Proliferation Treaty,
- International Convention for the Suppression of Terrorist Bombings

- Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf (1988 Protocol on Fixed Platforms)

At present Mauritania has neither fuel in use nor spent fuel. There are no spent fuel processing, reprocessing, storage or disposal facilities in Mauritania. However, sealed radioactive sources are used in industry, the medical sector, research, agriculture, etc.

SECTION B. Policies and practices

There are no nuclear fuel cycle facilities in Mauritania.

Safety and security of radioactive sources

There is a specific section for the security of radioactive sources in Law 2010-009 (Chapter 11) and its implementing Decree in accordance with the basis of the principles and objectives of the Code of Conduct on the Safety and Security of Radioactive Sources and the associated Guide on Import and Export.

SECTION C. Scope of application

There are no nuclear fuel cycle facilities in Mauritania.

Mauritania is a signatory to the Treaty on the Non-Proliferation of Nuclear Weapons and the safeguards agreements resulting from this treaty.

SECTION D. Inventories and Lists

The competent National Regulatory Body (ARSN) shall carry out a complete and official inventory of radioactive sources (orphan or non-orphan) throughout the national territory.

This campaign to identify and account for radioactive sources, users of ionising radiation and facilities has been completed and the web-based RAIS system is being used;

A temporary storage site for sources has been built and physically protected.

SECTION E. Legislative and regulatory framework

The Islamic Republic of Mauritania shall have the necessary legislative framework to fulfil its obligations under this Convention. The legislative framework and

The regulatory framework in line with international norms and standards is set up by Law No. 2010-009 of 20 January 2010 relating to Nuclear Energy and its implementing Decree No. 2012-170 of 12 July 2012.

- Law No. 2010-009 of 20 January 2010 on Nuclear Energy;
- Decree N°2012-170 of 12 July 2012 implementing certain provisions of Law N°2010-009 of 20 January 2010 relating to Nuclear Energy;
- Decree N° 2010-082 of 18 March 2010 Fixing the Organisation and Functioning of the National Authority for Radioprotection, Safety and Nuclear Security and its amending texts;

The objectives of the Law :

- To allow the beneficial uses of nuclear energy;
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- To ensure the adequate protection of present and future generations against the harmful effects of ionising radiation;
- To establish a system of regulatory control that aims to ensure the safety and security of peaceful applications using ionizing radiation sources, in particular through the creation of a competent regulatory authority for the application of the provisions of this Law and relevant international instruments.
- To provide for the implementation of the obligations entered into by Mauritania under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and any other international instrument in the fields of safety, security and non-proliferation of nuclear weapons to which Mauritania is a party.

The areas of application of the Law :

The Law applies to all activities involving exposure to ionising radiation, including the production, possession, use, import, export, transit, transport, storage, management of sources of ionising radiation or any other radioactive material identified by the Regulatory Authority.

The Law contains 61 articles out of 17 chapters dealing with all aspects of the peaceful use of Nuclear Energy in accordance with the principles defined by the relevant United Nations Conventions and Safeguards Agreements that Mauritania has ratified or signed.

CHAPTER 1: DEALS WITH GENERAL PROVISIONS CHAPTER 2: PROHIBITIONS

CHAPTER 3: DEFINITIONS

CHAPTER 4: FROM THE REGULATORY AUTHORITY CHAPTER 5: FROM AUTHORISATION

CHAPTER 6: INSPECTION AND COERCION.

CHAPTER 7: THE RESPONSIBILITY OF THE LICENCE HOLDER. CHAPTER 8: OF THE FUNDAMENTAL PRINCIPLES OF PROTECTION AGAINST IONISING RADIATION.

CHAPTER 9: PROTECTION OF PATIENTS EXPOSED TO IONISING RADIATION CHAPTER 10: EXPLOITATION AND PROCESSING OF RADIOACTIVE MINERALS CHAPTER 11: SAFETY AND SECURITY OF RADIOACTIVE SOURCES.

CHAPTER 12: RADIOACTIVE WASTE MANAGEMENT, TRANSPORT OF RADIOACTIVE MATERIALS AND RADIOLOGICAL EMERGENCY PLANS.

CHAPTER 13: PHYSICAL PROTECTION OF NUCLEAR MATERIAL CHAPTER 14: SAFEGUARDS

CHAPTER 15: EXPORT AND IMPORT CONTROLS. CHAPTER 16: CRIMINAL PROVISIONS

CHAPTER 17: TRANSITIONAL AND FINAL PROVISIONS.

DECREE N°2012 IMPLEMENTING CERTAIN PROVISIONS OF THE LAW.

The purpose of this decree is to set the terms and conditions for the application of law n°2010-009 of 20 January 2010, relating to nuclear energy. It lays down the conditions for carrying out activities falling within the framework of the peaceful use of nuclear energy and involving exposure to ionising radiation, in particular the use of electric generators of ionising radiation, the production, import, export, trade, treatment, handling, use, possession, storage, transport, transit and disposal of natural or artificial radioactive substances unless they are excluded or exempted .

The Decree, which consists of 150 articles and 4 annexes, establishes a number of rules in accordance with the above-mentioned law to determine the responsibility of suppliers, employers and workers in the use of ionizing sources. It sets the limits of the doses that must be absorbed in case of exposure of workers, patients and the public in accordance with international standards, and the measures that must be taken for the protection of workers, patients and the public exposed to radiation.

It also organises the transport of radioactive sources and substances and lays down the conditions for such transport and the management of radioactive waste according to type and category. Finally, this text lays down the procedures for inspecting facilities and controlling sources.

Regulatory body :

As indicated above, Law 2010-009 created the regulatory body: the National Authority for Radiological Protection, Safety and Nuclear Security (ARSN).

Decree 2010-082 establishing the organisation and operation of the ARSN was published on 31 March 2010. The ARSN is an effectively independent administrative authority, under the supervision of the Prime Minister, with financial autonomy, a national council and a president. It is the competent body in Mauritania for radiation protection, safety and nuclear security.

The President of the Authority is responsible for the technical, financial and administrative management of the ARSN (Article 13). He issues authorisations and implements the programme of inspections and investigations.

The national council has a role of administrative supervision and validation of the activities of the ARSN (Article 4).

SECTION F: OTHER GENERAL SAFETY AND SECURITY PROVISIONS

RESPONSIBILITY OF THE AUTHORISATION HOLDER.

The primary responsibility for radiological and nuclear safety rests with the licence holder. (Article 17 of the Act)

The licence holder shall ensure the safety and security of the activities, sources and installations for which it is responsible. To this end, he shall be required to :

- Develop and implement a radiological safety programme adapted to the nature and extent of the risks associated with the activities for which it is responsible. The Authority will determine the detailed content of the radiological safety programme;
- Notify the ARSN of any radiological emergency or loss of control of any source of ionising radiation ;

- Designate specific working and storage areas for radioactive materials and ensure that these areas are appropriate, well identified, well ventilated and adequately shielded ;
- Implement a programme of radiological monitoring and medical surveillance of personnel;
- Ensuring environmental control of workplaces;
- Maintain an up-to-date inventory of sources of ionising radiation and all other radioactive materials;
- To ensure regular and appropriate training in radiation protection for all users of ionising radiation sources;
- Designate a person in charge of the operational aspects of radiation safety as necessary;
- Notify the ARSN of any modification or cessation of the activity and take the necessary safety and security measures in this respect.

The holder of a licence issued by the ARSN must work to establish and maintain a nuclear safety and security culture within the establishments for which it is responsible. (Articles 18 and 19)

Human and financial resources.

The State shall put at the disposal of the ARSN the human, material and financial resources necessary to carry out its missions as defined by this Law. The State shall put at the disposal of the ARSN the human, material and financial resources necessary to carry out its missions as defined by the Law (Article 9 of the Law). (Article 9 of the Law)

Radiation protection

Any practice likely to result in exposure to ionizing radiation must be justified by the net social and economic benefits it provides. (Article 20)

Protection against ionizing radiation shall be optimized so that the magnitude of individual doses, the number of persons exposed and the probability of exposure are kept as low as reasonably achievable, social and economic factors being taken into account. (Article 21)

The exposure of persons to ionizing radiation must be strictly limited so that the doses received by the whole body or organs are always below the limits set by regulations. (Article 22)

The requirements relating to protection against exposure to ionising radiation, the safety and security of radioactive sources, the transport of radioactive sources and substances and the management of radioactive waste are laid down by decree. (Article 23)

SECTION G: SAFETY OF SPENT FUEL MANAGEMENT

This section is not applicable to Mauritania because there is no SF generated because there is no nuclear power plant or research reactor.

SECTION H: SAFETY OF RADIOACTIVE WASTE MANAGEMENT

The ARSN shall establish and maintain a national register of radioactive sources. Article 30

The ARSN shall take the necessary measures to protect the information contained in the register and ensure its security.

The ARSN shall establish a categorisation of sources in accordance with that established by the IAEA for the definition of the safety and security measures to be implemented. Article 31

The ARSN shall collaborate with the institutions concerned in defining the design basis threat and implementing the related security measures Article 32

The ARSN is coordinating the implementation of a national strategy to regain control of orphan radioactive sources. Article 33

The ARSN proposes regulations and establishes procedures for the security of radioactive sources, in particular for the import, export and transit of radioactive sources based on international recommendations and, in particular, the Code of Conduct on the Safety and Security of Radioactive Sources. Article 34

These regulations and procedures enable the ARSN to carry out an assessment of the information in order to ensure that the legal or natural person who is to receive the source has the necessary capacities to ensure safety and security.

MANAGEMENT OF RADIOACTIVE WASTE, TRANSPORT OF RADIOACTIVE MATERIALS AND RADIOLOGICAL EMERGENCY PLANS.

No person may undertake radioactive waste management activities without obtaining prior authorization from the ARSN in accordance with the provisions of Chapter 5 of this Act.

The conditions and procedures for the management of radioactive waste from its production to its disposal, including segregation, collection, characterisation, conditioning and treatment shall be defined by decree.

The import of radioactive waste is prohibited in the Islamic Republic of Mauritania. Article 35

The conditions and modalities for the decommissioning of facilities containing radioactive sources or any other radioactive material, including the decommissioning plan and the related financial aspects, shall be defined by regulation. Article 36

The transport of radioactive materials is subject to the prior authorisation of the ARSN. Article 37

The transport of radioactive materials is carried out in accordance with international regulations, in particular those of the International Atomic Energy Agency.

To deal with any accident situation involving radioactive materials, a national radiological emergency plan is drawn up by the Ministry of the Interior in cooperation with the ARSN and other relevant institutions. This plan must be reviewed and updated on a regular basis. Article 38.

A national radiological emergency committee shall be established.

A radiological emergency plan is required for any installation using sources of ionizing radiation.

This plan must be approved by the ARSN before the authorisation is issued.

In this respect, the holder of the authorisation must provide the personnel in charge of the intervention and in particular the Radiation Safety Officer with the means to implement the radiological emergency plan. These means must be in good working order and subject to inspections by the ARSN. Article 39 .

A draft text on the transport of radioactive material has been finalized and is in the process of being published.

Annexes

- Law No. 2010-009 of 20 January 2010 on Nuclear Energy;
- Decree N°2012-170 of 12 July 2012 implementing certain provisions of Law N°2010-009 of 20 January 2010 on Nuclear Energy;
- Decree N° 2010-082 of 18 March 2010 Fixing the Organisation and Functioning of the National Authority for Radioprotection, Safety and Nuclear Security and its amended texts;
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