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دولة إرتريا  
وزارة الشؤون الخارجية

The State of Eritrea  
Ministry of Foreign Affairs

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**FIRST NATIONAL REPORT OF THE STATE OF ERITREA  
TO THE 7<sup>TH</sup> REVIEW MEETING OF THE CONTRACTING PARTIES  
TO THE JOINT CONVENTION ON SAFETY OF SPENT FUEL  
MANAGEMENT AND ON THE SAFETY OF RADIOACTIVE WASTE  
MANAGEMENT**

23 February 2021

Ministry of Foreign Affairs of the State of Eritrea

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## **SECTION A: INTRODUCTION**

The State of Eritrea deposited an instrument of accession with the **Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management** (Joint Convention) on 13 March 2020. The Convention entered into force on 16 July 2020. There was no declaration or reservations attached to the instrument of accession.

The State of Eritrea is a small country with a population of approximately 4.38 million and with a Sea borderline of 1950 kms, mainland and island coastline included, along the busiest sea-routes of the World, the Red Sea Coast in East Africa. Its geographic location along the seacoast places it in a very risky situation where toxic and radioactive waste could easily be dumped illegally in international waters or neighboring countries. Eritrea is a state party to the Nuclear Non-Proliferation Treaty and to its Additional Protocols and Safeguards Agreements. In relation to the Joint Convention:

- The State of Eritrea has no nuclear industry, no research reactors or any other facility generating radioactive substances; and
- There is no nuclear fuel or spent fuel liquid waste on Eritrean territory.

Therefore, with the current situation of non-radioactive status, many of the requirements of the Joint Convention do not apply to Eritrea.

Eritrea had put in place its first draft legislation on radiation protection and its regulatory infrastructure in 2011 (Legal Notice No.2011 Regulation to Control the Use of Radiation Sources and Manage the Associated Radioactive Waste, and Proclamation No. 2012: The Eritrean Radiation Safety and Security Regulatory Authority). These were presented to the IAEA Legal Advisors for review and appropriate comments were received. The two proclamations are being reviewed again to close the identified regulatory gaps and to align them with the prevailing international instruments that have been ratified or are going to be ratified, including the Joint Convention. The legislations cover all relevant radiological safety issues, in line with the IAEA safety and security standards.

Introduction of nuclear technology in Eritrea was first proposed with the approval for the establishment of a Radio Therapy Centre in 2006, and subsequently with the approval of IAEA related projects from several Ministries. The cooperation between IAEA and various Ministries continues to this day. However, regardless of the strong commitment either side has shown, the progress made is quite limited, especially with regards to availability or presences of nuclear resources or fuel in open or liquid forms which have been absent. The project for the Establishment of Radiotherapy Center was halted before the radioactive source (Cobalt-60) was ordered in 2017-8 and thus no radioactive waste of either open or sealed sources was generated in the past.

There are currently about 70 diagnostic radiology facilities in the country. The Ministry of Agriculture and the Eritrean Standards Institute also have projects that would use small quantities of radioactive sources, which are expected to be introduced late this year. As such, the above mentioned sectors are expected to be generators of radioactive waste in the country, albeit, at limited scale.

This is Eritrea's first national report as per Article 32 of the Joint Convention and is presented to the 7<sup>th</sup> Joint Convention Review Meeting to be held in Vienna in May 2021.

Due to the absence of a comprehensive law and regulatory authority, the report attempts to describe the current measures being implemented by the Ministry of Land, Water and Environment (MOLWE) based on Proclamation No. 179/2017: The Eritrean Environmental Protection, Management and Rehabilitation Framework.

The report has been produced in coordination with the Ministry of Foreign Affairs (MOFA), the IAEA National Liaison Officer and the Department of Environment, a department currently responsible for issues of toxic chemical, biological and radioactive waste management in Eritrea.

The main institutional counterparts under The Eritrean Environmental Protection, Management and Rehabilitation Framework Proc. No. 179/2017– are the Government Ministries dealing with; human health; agriculture; energy and mines; transport and communication; infrastructure; marine resources; land, water and environment; trade and industry, as provided in Annex1.

The report has been prepared in line with the simple provisions of the Joint Convention, including the adopted Guidelines regarding the Form and Structure of National Reports as follows:-

- Section A: Introduction
- Section B: Policies and Practices
- Section C: Scope of Application
- Section D: Inventories and Lists
- Section E: Legislative and Regulatory System
- Section F: Other General Safety Provisions
- Section H: Safety of Radioactive Waste Management
- Section I: Trans boundary Movement
- Section J: Disused Sealed Sources
- Section K: General Efforts to Improve Safety
- Section L: Annexes

## **2. Section B - Policies and Practices:**

The mandate of the Ministry of Land, Water and Environment, through the Department of Environment, is to ensure that the multi-faceted developmental programs designed for both

the present and the future are socio-economically and environmentally sustainable and compatible with environmental protection laws. In order to achieve this mandate, the Ministry of Land, Water and Environment developed Environmental Proclamation Framework in 2017. The goal of this proclamation is to ensure that any proponent of development project and activity shall be in accordance with the requirements established by the National Environmental Assessment Procedures and Guidelines (NEAPG) with a view to achieving sustainable development.

**Strategies to be used were as follows:**

- To reinforce the National Environmental Management Plan and maintain an up-to-date register of toxic, hazardous and radioactive substances;
- To design and set up a national framework and standards against trans-boundary especially (Red Sea Coast pollution) movement of toxic, hazardous and radioactive wastes and/or the achievement of environmentally sound management of hazardous substances;
- To control the generation of toxic, hazardous and radioactive wastes and ensure that those banned shall be stringently controlled;
- To monitor the effects and control all phases of the life cycle of all substances likely to have an adverse impact on human health and environment; and
- To determine and use environmentally safe and technologically sound techniques for disposal of toxic, hazardous and radioactive substances.

**3. Section C - Scope of Application**

- Eritrea does not have civilian nuclear reactors. There are also no reprocessing facilities.
- Eritrea has civilian applications that are used in health care services i.e., for X-ray's, though there is no inventory of waste thereof.
- Eritrea does not have spent fuel and radioactive waste management facilities as no such wastes are generated domestically.

**4. Section D – Inventories and Lists:**

The Government, through the Department of Environment or any other Governmental agency, has not carried out any inventories of radioactive waste, including orphan sources. Awareness activities are yet to be undertaken in this aspect.

**5. Section E – Legislative and Regulatory System:**

The Eritrean Environmental Management Regulations No.127 / 2017 is the current proclamation that has some provisions referring to the legislative and regulatory framework for implementing the country's obligations under this Convention.

Accordingly, The Director General of the Department of Environment, under Article 7 of the regulation has the mandate to: -

- ensure that due attention is given to the environmental concerns in different sectors, through coordination with all line Ministries and other relevant agencies;
- review, approve or disapprove as appropriate, environmental impact assessment reports and environmental impact mitigation plans submitted by project proponents and issue or deny environmental clearance in accordance with the National Environmental Assessment Procedures and Guidelines;
- promote and raise public awareness on environmental protection and management issues by making available to the public scientific data and other information pertaining to environmental pollution and degradation and environmental protection matters and mobilize resources for environmental rehabilitation.

#### **Regulatory Infrastructure:**

- Eritrea has signed the Revised Supplementary Agreement (RSA) and is in the process of finalizing the Nuclear Law and Regulatory infrastructure for adequate protection of the public and environment from the harmful effects of ionizing radiation where IAEA is expected to play an active role in its finalization in line with international standards;
- Initial activities are taking place to finalize the Integrated Nuclear Security Support Plan (INSSP) in cooperation with the IAEA, which is expected to serve as the main mechanism for developing robust nuclear security infrastructure;
- Some officers from the law enforcement agencies have been taking trainings and participating in workshops organized by the IAEA concerning nuclear security;
- One officer from the Eritrean Police Force had studied nuclear security at master's level (MiNS) at the Brandenburg University of Applied Sciences through the online programme funded by the IAEA;
- General plans on radiation safety, especially in medicine (diagnostic radiology, radiation therapy, and nuclear medicine) are about to be initiated soon. However, the legislative and regulatory frameworks are in draft form consultation with the IAEA legal advisors is under consideration;
- National register of radiation sources has not been yet introduced, and there is lack of qualified and competent staff in the areas of regulation, radiation safety, and the protection of patients.

#### **6. Section F – Other General Safety Provisions:**

Article 10 of Proc. No.179/2017 describes the general responsibilities for safety focusing on “Shared Responsibilities”. Notwithstanding the provisions of Article 6 hereof, no person, public or private, shall be relieved from fulfilling their respective responsibilities and obligations to protect the environment and cooperate in supplying relevant information at their disposal. This is

clearly outlined for Environmental Units in Line Ministries (1) and that each line Ministry shall carry out its functions and duties in connection with the environment as prescribed within its defined mandate, provided that such mandate does not contradict with the provisions of the Proclamation.

#### **7. Section H - Safety of Radioactive Waste Management:**

Under Article 13 and Article 14 of the legal notice 127/2017, Management of Radioactive Substances and Handling of Hazardous Waste; no person shall import, process, mine, export, possess, transport, use or dispose of radioactive materials or other sources of dangerous radiation unless he/she holds a license issued under relevant law. Illegally held radioactive substances shall be seized, impounded, destroyed, or disposed by the competent authority in such a manner that precludes environmental damage.

#### **8. Section I: Trans-boundary Movement:**

Eritrea does not have a record of experiences concerning Trans-boundary movements of radioactive waste. There were some reports indicating suspected disposal of radioactive waste along the Red Sea Coast.

#### **9. Section J: Disused Sealed Sources:**

Eritrea does not have disused sealed sources.

#### **10. Section K: General Efforts to Improve Safety:**

Eritrea had drafted and presented two regulations in 2011 for review by the IAEA and the currently the legislations are under the process of second review by the Government. Legislation of the Nuclear Law and establishment of the Regulatory Authority are also some of the priorities as these regulations have to be accounted to the Regulatory Authority. Upon approval, an agency will be established and radiation protection, proper management of waste, and public awareness on radiation safety and its communications to the public are expected to be enhanced.

#### **11. Section L: Annexes:**

**Annex 1:** List of participating institutions:

The Proclamation cited above (Proc. No. 179/2017) has established the National Environmental Council (NEC), cognizant of the fact that the environment is a cross-cutting issue and the task of its sustainable protection and management requires maximum responsible cooperation and coordination between all stakeholders.

The NEC shall be composed of Director Generals assigned by the respective ministers of the following ministries:-

- (a) The Ministry of Agriculture
- (b) The Ministry of Health

- (c) The Ministry of Energy and Mines
- (d) The Ministry of Land, Water and Environment
- (e) The Ministry of Marine Resources
- (f) Ministry of Public Works
- (g) The Ministry of Trade and Industry; and
- (h) The Ministry of Transport and Communications

**Annex 2:** Compilation of treaties under the auspices of the IAEA: The basic agreements include the following:

- Agreements on the Privileges and Immunities of IAEA
- Conventions on the Physical Protection of Nuclear Material
- Convention on Early Notification of a Nuclear Accident
- Convention on Assistance in 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
- Revised Supplementary Agreement Concerning the Provision of Technical Assistance by the IAEA
- African Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology
- Application of Safeguards in Connection with the Treaty on Non-Proliferation of Nuclear Weapons;
- African Nuclear-Weapon-Free Zone Treaty (the Treaty of Pelindaba);