

Legislative and Regulatory Framework: Implementation of International Atomic Energy Agency (IAEA) Safety Standards for the Safe and Secure Transport of Radioactive Material in Nigerian

Title: Legislative and Regulatory Framework: Implementation of International Atomic Energy Agency (IAEA) Safety Standards for the Safe and Secure Transport of Radioactive Material in Nigerian

A I. Amofuokhai,

Transport Safety Division, Nigerian Nuclear Regulatory Authority, Abuja, Nigeria

Email address: andyamo2000@yahoo.com

Abstract: The transport of radioactive material within international and national boundaries poses unique safety and security challenges that necessitates a strong regulatory framework to ensure the protection of people, property, and the environment from its harmful effect during transport. In Nigeria, the overall regulation of transport activities with regards to radioactive material is primarily the responsibility of the Nigerian Nuclear Regulatory Authority (NNRA). This paper explores the regulatory framework and compliance mechanisms guiding the safe and secure transport of radioactive material in Nigeria, with a focus on the implementation of the International Atomic Energy Agency (IAEA) Safety Standards and Security Recommendations which serves as the foundational guidelines for Nigeria's domestic transport safety and security regulatory control regime. Nigeria, as a Member State of the IAEA, has consistently demonstrated its commitment to incorporating these safety standards and recommendations into its national legal and regulatory framework. The NNRA has made significant progress in domesticating the IAEA Safety Standards and Security Recommendations through the promulgation, development, implementation and enforcement of national legislation and regulations. The Nigerian legal and regulatory framework provides the NNRA with the statutory mandate and authority to oversee, control, and regulate all activities related to the safe and secure transport of radioactive material. The law establishes a licensing regime, prescribes technical and administrative requirements and empowers the NNRA to conduct inspections and enforce compliance as well as the establishment of security measures. The implementation of IAEA standards in Nigeria has been facilitated through capacity building, training programs, and technical cooperation with IAEA and other international partners. These efforts have led to improved awareness, reporting systems, and emergency response capabilities. Despite these remarkable achievements, Nigeria faces several challenges in fully implementing and sustaining IAEA safety standards. Key issues include insufficient inter-agency coordination, and a need for greater public awareness about the risks and safety measures related to radioactive materials. Moreover, the informal transportation network and porous borders raise concerns about the potential for illicit trafficking and unregulated movement of radioactive material. To address these challenges, the paper recommends strengthening inter-agency collaboration through the establishment of a national transport safety and security coordination framework that includes Customs, Police, Civil Defence Corps, Emergency Services, and the NNRA. Investment in transport infrastructure and radiation monitoring equipment is also crucial to enhance the physical protection and real-time tracking of radioactive shipments. Also, continuous periodic review of national regulations in line with IAEA and other international best standards are necessary to reflect updates and emerging global best practices. In conclusion, Nigeria regulatory framework for the safe and secure transport of radioactive material is rooted in the IAEA and other international best standards and it has consistently demonstrated a clear and genuine commitment to global radioactive material transport safety and security regime. While notable progress has been made in implementing IAEA Safety Standards, sustained efforts are needed to address institutional and awareness-related gaps. Strengthening compliance mechanisms and enhancing national capacity will not only ensure the safe and secure transport of radioactive material within Nigeria but also contribute to international safety and security of radioactive material in transport.

Country or International Organization

Instructions

Author: Mr ANDREW IKHAZUAGBE, Amofuokhai (Nigerian Nuclear Regulatory Authority)

Presenter: Mr ANDREW IKHAZUAGBE, Amofuokhai (Nigerian Nuclear Regulatory Authority)

Track Classification: Track 1 Legislative and Regulatory Framework for Safe and Secure Transport