

Advancing Nuclear Security in Transport in West Africa: Bridging Safety and Security in Radioactive Material Movements.

The transport of radioactive material presents dual challenges: ensuring safety to protect people and the environment from accidental exposure, and ensuring security to prevent malicious acts such as theft, sabotage, or illicit trafficking. Traditionally, transport safety has long focused on the prevention of accidents, radiation exposure minimisation, and ensuring the integrity of packaging systems.

Currently, the evolving global threat environment has necessitated a broader perspective that incorporates transport security. Security measures aim to prevent, detect, and respond to intentional acts such as theft, sabotage, and illicit trafficking during transport.

This paper explores the conceptual and practical shift from transport safety to transport security, examining how the two domains intersect and diverge. It draws upon international frameworks, including the IAEA Safety Standards (SSR-6) and the Nuclear Security Series (NSS 9-G), to illustrate the interface between safety requirements and security obligations.

A Case study from the West Africa region is highlighted to demonstrate region-specific challenges, such as under-declaration of radioactive consignments, limited detection capabilities at points of entry, and the need for inter-agency coordination. The analysis underscores that achieving resilient nuclear security in transport requires policy harmonization, investment in secure tracking and detection technologies, and sustained capacity building for frontline officers.

The paper concludes with recommendations for enhancing the integration of safety and security practices in transport systems, contributing to the prevention of materials becoming out of regulatory control and strengthening the global nuclear security regime.

Country or International Organization

Instructions

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