

Kenya's Leadership in Advancing Transport Security of Radioactive Material in East Africa: Strengthening Capacity Building, Instructor Development, and Regional Cooperation

Purpose

The secure transport of radioactive material (RAM) is critical to ensuring public safety, preventing malicious acts, and sustaining the peaceful use of nuclear technology in health, industry, agriculture, and research. Transport is often the most vulnerable phase in the lifecycle of RAM, taking place in the public domain and exposed to risks such as theft, diversion, or sabotage. Kenya has emerged as a leader in East Africa by implementing an integrated strategy that strengthens national regulatory frameworks, builds inspector competence, and fosters regional cooperation. This abstract outlines Kenya's sustained initiatives, with Transport Security Inspections Workshop and East Africa Regional Transportation Security Symposium serving as examples within a broader programme that also incorporates instructor development to ensure sustainability.

Methodology

Kenya's approach aligns with IAEA Nuclear Security Series guidance, particularly NSS No. 14, NSS-9G (Rev.1), and the Code of Conduct on the Safety and Security of Radioactive Sources, as well as legally binding instruments such as the Convention on the Physical Protection of Nuclear Material (CPPNM) and its Amendment. The Kenya Nuclear Regulatory Authority (KNRA), in collaboration with the IAEA, the U.S. Department of Energy's Office of Radiological Security (ORS), and other partners, has implemented a dual-track methodology:

Technical Capacity Building for Inspectors:

Delivery of modular courses covering the full inspection lifecycle: legal framework, inspector behaviours, planning, conducting inspections, reporting, and continuous improvement.

Practical application through scenario-based exercises and mock transport inspections, incorporating the graded approach and risk-informed decision-making.

Instructor Development:

Integration of Course Transition (CT) Series and Systematic Approach to Training (SAT) methodologies to prepare Kenyan subject matter experts as certified trainers.

Building national capacity to design, deliver, and evaluate transport security courses tailored to regional needs.

Regional Engagement:

Hosting multi-State courses, inviting participation from East African regulators, law enforcement agencies, and border authorities.

Establishing platforms for operational experience exchange, harmonization of inspection procedures, and joint exercises for transboundary shipments.

Results

This sustained programme has achieved the following outcomes:

Enhanced Inspector Competence: Participants demonstrate improved ability to plan, conduct, and report on RAM transport security inspections in line with national and international standards.

Sustainable Training Capacity: Development of a cadre of Kenyan instructors capable of independently delivering high-quality transport security training, reducing reliance on external facilitation.

Strengthened Regional Cooperation: Improved interoperability and trust among East African States through joint training and shared best practices, supporting harmonized approaches to inspections and enforcement.

Institutionalized Continuous Improvement: KNRA has embedded post-inspection feedback mechanisms, lessons-learned dissemination, and adaptation to emerging IAEA guidance and technologies, such as tracking systems and secure communication tools.

Conclusion

Kenya's leadership in transport security of radioactive material demonstrates the effectiveness of combining national capacity building with proactive regional engagement. By developing both technical inspection skills and instructional capability, Kenya is ensuring long-term sustainability of nuclear security competencies, in line with the objectives of the International Conference on the Safe and Secure Transport of Nuclear

and Radioactive Material. These initiatives contribute to a robust, durable, and responsive transport security regime—one that safeguards radioactive materials in transit, maintains public trust, and facilitates their uninterrupted use for peaceful purposes.

Country or International Organization

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Instructions

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