

Overcoming Denial of Shipment: Regulatory Challenges and Approaches to Facilitate Transport of Radioactive Material

Impediments to the transport of radioactive material, even when shipments fully comply with international regulations, have become a recurring challenge with significant legal and societal implications. The phenomenon of “denial or delay of shipment” occurs when carriers, ports, or authorities refuse or postpone transport due to liability concerns, political sensitivities, or public pressure. Such impediments can directly affect the availability of radioisotopes for medicine, industry, and research, with serious consequences for public health and economic activity.

From a legal standpoint, these refusals raise complex issues. They can conflict with domestic regulations guaranteeing the free movement of goods, international standards on the safe and secure transport of radioactive material, and broader non-discrimination principles embedded in trade and environmental law. The lack of clear legal frameworks often drives operators and carriers to avoid radioactive consignments, despite compliance with packaging and safety requirements. In several cases, airports have refused to load shipments, shipping lines have declined to carry them, or local authorities have blocked passage through populated areas. These actions can create legal uncertainty and operational disruption, highlighting the need for coherent and harmonized regulations at both national and international levels.

Public concern plays a central role in shaping these impediments. Accidents during transport, such as the loss of a high-activity source or the discovery of radioactive waste or contaminated materials in transit, have heightened perceptions of risk. Even when incidents result in minimal exposure or no radiological harm, societal fears may lead to demands for stricter laws or outright bans on transport through certain regions.

The IAEA identified that denial or delay of shipments occurs even when consignments comply with technical safety and security standards. Its workshops, training, and establishment of National Focal Points are meant to help States implement regulations effectively, respond to denials, and engage in coordinated approaches. This issue was recently highlighted during a side event at the IAEA’s 69th General Conference in Vienna, entitled Facilitation of the Safe and Secure Transport of Radioactive Material. These initiatives, together with the Denial of Shipment Working Group, provide guidance, capacity building, and documentation to help Member States understand patterns, causes, and possible remedies (IAEA, 2006; IAEA, 2025 workshops).

These efforts emphasize the importance of transparency, stakeholder communication, and public participation in regulatory processes to maintain confidence while facilitating safe and secure transport. Clear assignment of responsibilities, harmonization with international transport regulations, and adequate liability provisions are essential to reducing operational reluctance among carriers and authorities.

The paper will further analyze the legal consequences of impeding the transport of radioactive material, examine illustrative cases of denial or delay, and discuss approaches to addressing public concerns without undermining compliance with international obligations. It will also highlight the importance of proactive communication, liability clarity, and consistent regulation in ensuring that radioactive materials essential for health care, industry, and research can be transported safely, securely, and reliably.

Country or International Organization

Instructions

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