

Regulatory Synergy: Ensuring Safe and Secure Transport of Radioactive Material within Australia's Multi-Jurisdictional Framework

The safe and secure transport of radioactive material in Australia requires coordination among multiple authorities across various jurisdictions. Governed by Commonwealth, State, and Territory legislations, the regulatory framework implements the IAEA Regulations for Safe Transport of Radioactive Material (SSR-6) through the ARPANSA Code for the Safe Transport of Radioactive Material by road, rail, and inland waterways. For air transport, the Civil Aviation Safety Authority enforces ICAO Technical Instructions, while sea transport follows the IMDG Code under the Australian Maritime Safety Authority.

Eleven Competent Authorities oversee the transport of radioactive material in Australia. Among them, ARPANSA regulates Commonwealth entities for road, rail, and inland waterways not covered by marine legislation. As a National Competent Authority ARPANSA sets national codes, standards and guidelines for the transport of radioactive material.

The security of radioactive sources is regulated by the ARPANSA Code of Practice for the Security of Radioactive Sources, whereas the Australian Safeguards and Non-Proliferation Office oversees the security of nuclear material through the Nuclear Non-Proliferation (Safeguards) Act.

To maintain national uniformity in the regulation of radioactive material, the National Directory for Radiation Protection plays an important role aiming to create a seamless regulatory framework across Australia, fostering cooperation between Commonwealth, State, and Territory authorities to ensure the safe generation and use of radiation. For the transboundary movement of radioactive material, international harmonisation is achieved through the application of the IAEA Transport Regulations, which are integrated into key global frameworks such as the IMDG Code for maritime transport, the ICAO Technical Instructions for air transport, and the UN Model Regulations.

This paper examines the critical need for regulatory synergy between state and Commonwealth authorities to ensure the safe and secure transport of radioactive materials across Australia. By analysing existing frameworks, policies, and the roles of different authorities, it highlights the necessity of harmonizing safety and security standards to mitigate risks. The paper addresses challenges and opportunities in achieving regulatory coherence and underscores the importance of inter-agency collaboration. Through case studies and comprehensive analysis, the paper provides insights into best practices and recommends measures to enhance regulatory collaboration for the protection of the health and safety of people and the environment, and for improving security. Despite the robustness of Australia's regulatory framework, the paper suggests areas for improvement to further enhance regulatory synergy.

Country or International Organization

Instructions

Author: Dr SARKAR, Samir

Presenter: Dr SARKAR, Samir

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