



**Developing a Memorandum of Understanding
Concerning the Security of
Radioactive Materials Transportation
in the United States**

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ABSTRACT

In the United States, three federal agencies have statutory authority to ensure the security of radioactive materials in transport. These agencies are the U.S. Department of Homeland Security, the U.S. Department of Transportation and the U.S. Nuclear Regulatory Commission. Given that three agencies have authority; this could inadvertently lead to overlapping and conflicting requirements, for ensuring the security of radioactive materials in transport. These agencies are working together to avoid this situation. This paper will describe the statutes that define each agency's role regarding secure transport of radioactive materials and how these agencies are working together to develop a memorandum of understanding (MOU) to define each agency's responsibility and authority, to ensure consistent application of the statutes, and to avoid duplication of efforts. The major program elements, such as inspection, enforcement and development of requirements, are elaborated upon in the paper.

INTRODUCTION

Due to the similar, yet distinct, missions of the U.S. federal agencies associated with the transport of radioactive materials and the potential overlapping responsibilities, an MOU is being formed as a formal mechanism for the agencies to work together toward achieving, in an efficient and effective manner, the common goal of protection of public health and safety and ensuring common defense and security. This MOU will consist of an agreement that defines each agency's roles and responsibilities as well as interaction mechanisms for coordination and collaboration.



For its part, the Department of Homeland Security (DHS) has delegated responsibility for transportation to the Transportation Security Administration (TSA), which has a mission to protect the U.S.' transportation systems and ensure freedom of movement for people and commerce. Within the U.S. Department of Transportation (DOT), the Pipeline and Hazardous Material Safety Administration (PHMSA) has the overarching goal to ensure both safety and security of the U.S. transportation systems, including pipelines. The PHMSA offers technical expertise and continuity between safety and security through the use of a systems-based approach to vulnerability, risk analysis and management practices. The U.S. Nuclear Regulatory Commission (NRC) regulates the possession, use and transfer of civilian radioactive material. Like DOT, the NRC has both safety and security mandates: the agency ensures adequate protection of public health and safety and the environment, as well as adequate protection in the secure use and management of radioactive materials. In sum: the DOT regulates the movement of goods to ensure a safe transportation system, the NRC regulates how its licensees will transfer radioactive material from one to another, and more recently, the DHS has been formed with a mission to secure the country and preserve its freedoms.

The program elements of the MOU are: 1) risk assessments, 2) strategic planning, 3) standards regulations, guidelines, advisories and directives, 4) inspection and enforcement, 5) technical support, 6) sharing information during emergency response, 7) legislative matters, 8) budget, 9) communication, 10) intelligence and information sharing, 11) background investigations, and 12) research and development.

AUTHORITIES

The MOU identifies the authorities for each agency. These authorities are enshrined in legislation, enacted by the U.S. Congress. Examples of legislation that has defined agency authorities are:

- The Atomic Energy Act of 1954, as amended, authorizes the U.S. NRC to license and regulate the possession, use and transfer of radioactive materials.
- In 1966, the "U.S. Department of Transportation Act" formed the DOT to guide the nation's transportation policy and administration.
- In 2002, the U.S. Congress passed the Homeland Security Act, which created the DHS and assigned it the lead responsibility for transportation security in the U.S. The Secretary of DHS has since delegated the lead for transportation security to the TSA.
- A 2004 Congressional Act created the DOT's Pipeline Hazardous Materials Safety Administration, assigning it responsibility for promulgating and enforcing regulations and administering a national safety and security program of multimodal hazardous materials transportation.



PROGRAM ELEMENTS

Program elements have been identified by the three agencies to guide the coordination efforts. The program elements were selected by considering the most important coordination interactions that should occur in order to reduce regulatory redundancy and therefore conserve resources.

Risk Assessments

Risk assessments include studies done to determine radiological consequences of threats to the radioactive material in a mode of transportation. These assessments include specific reviews focused on packaging configurations. Interactions among the agencies regarding risk assessments will leverage the agencies' resources and identify areas in which consistency between safety and security needs to be maintained.

Strategic Planning

Each agency performs strategic planning. Security planning is based on risk. The parties will strive for consensus concerning measures for the transportation of radioactive material to manage risk at acceptable levels and minimize the consequences of security events. The parties will share initiatives and activities for achieving identified performance security goals, as appropriate.

Regulations and Guidance

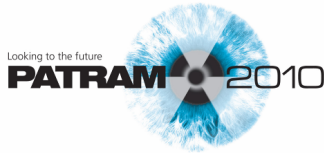
Standards, regulations, guidelines, advisories, orders and directives are the typical means for U.S. Government agencies to issue requirements, guidance and notices. Coordination of the development of these requirements and the guidance that explains how to implement the requirements will leverage the expertise of the respective agencies to minimize redundancy and conflicting conditions.

Inspection and Enforcement

Each agency performs inspection and enforcement activities for the organizations over which it has cognizance. Coordination of such activities serves to maximize available resources. It also presents the opportunity for each agency to use enforcement discretion as deemed appropriate. After the MOU is finalized, working arrangements will be established, including protocols for such inspection and enforcement interactions.

Technical Support

The technical support program element provides a contingency for one agency's limited resources to be supplemented by those of another agency. Resources may be required over and beyond what is available to a particular agency due various circumstances. The request for assistance must be made in writing.



Sharing Information During Emergency Response

Sharing information during an emergency response is a program element that will serve to coordinate agencies' emergency response activities.

Legislative Matters

This program element will provide for coordination in the development of legislation. Significant time and resources go into development and issuance of legislation. This element provides for coordination among agencies from the identification of the need for legislation in the effort to avoid resource-intensive modifications to drafted legislation that is nearing maturity.

Budget

The budget program element clarifies that the MOU does not go beyond the appropriated funds for each agency. It also states that the MOU is neither a fiscal nor an obligating document. Further, this program element makes clear that the MOU does not authorize expenditure of funds in any manner.

Communication

The communication program element provides for official points-of-contact to be developed for each agency and seeks to leverage existing interagency forums for interaction.

Intelligence and Information Sharing

The intelligence and information sharing program element provides the avenue for intelligence, security and threat information interagency interactions concerning the transport of radioactive materials. Information sharing, with regard to security incident occurrence in the field, is facilitated with this element.

Background Investigations

Certain U.S. regulations require background investigations to be performed in granting access to radioactive material and information regarding transports, as well as granting approval for drivers of radioactive material conveyances. The background investigation program element serves to reduce redundancy among the agencies' individual programs. The program also advocates reciprocity, or acceptance by one agency of another agency's investigation, when possible. Reciprocity can avoid duplicating much of the time-intensive work involved in a background investigation.

Research and Development

Research and development is a program element that enables collaboration of recently completed and on-going safety and security projects. This relationship will save resources



and facilitate an overall project management structure to meet two or more agencies' needs, rather than focus solely on one.

DISCUSSION

This MOU was intentionally developed to be broad in scope to serve as the infrastructure for interactions among the three agencies with regard to the security of transportation of radioactive material. While the structure of the MOU provides this breadth, addenda to the MOU and working arrangements will be configured after the MOU is issued to establish details on interaction protocols that will include frequencies of meetings and notification mechanisms.

CONCLUSIONS

Implementation of this MOU will enhance the coordination and collaboration among the three agencies. This will ensure that activities for transport of radioactive material regulated by the U.S. Government are maintained at an acceptable level of risk. The implementation of the MOU will also ensure that the three agencies' actions with regard to the security of transporting radioactive materials are done so in an efficient and effective manner.