35th Meeting of the Transport Safety Standards Committee (TRANSSC)

14 December 2017

Agenda Item 3.8
Update and Feedback on Draft Transport Safety–Security Interface Document

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Background

- Long term international efforts have focused on transport safety and transport security separately
- The interface between safety and security has not been addressed in a coordinated, consistent, and logical manner

**Transport Safety**

**RECOMMENDATIONS**

- Regulations for the Safe Transport of Radioactive Material
  - 1961
  - 1964
  - 1967
  - 1973
  - 1985
  - 1996
  - 2000
  - 2005
  - 2009
  - 2012
- Associated guidance and advisory documents
  - 1961 to 2014

**Transport Security**

**RADIOACTIVE MATERIALS**


**NUCLEAR MATERIALS**


**NUCLEAR AND RADIOACTIVE MATERIALS**

- 2013: NSS No. 20 – Objective and Essential Elements of a State’s Nuclear Security Regime

**Transport Safety and Security Interface**

- Initial effort begins in 2016

**Convention**

- CPPNM
  - Into force 1987
- Amendment to CPPNM
  - Into force 2016

9/11/2001
Challenge

Because there is an important interface between transport safety and security, it was decided to initiate an effort to address the interface for low-activity radioactive material.

Why focus on low-activity material?
It was recognized that many developing countries:

1. have scientific, medical and agricultural applications associated with low-activity materials, but
2. generally, they do not have a significant number of applications utilizing higher-activity radioactive and/or nuclear material.

Completing this effort could:

– assist these countries in strengthening safe and secure transport, and
– serve as a demonstration and guide on how later to address this important interface for the higher-activity radioactive material and nuclear material.
Consultancy Meeting
Objectives and Scope

Implementation efforts lead by NSNS, but developed and planned jointly with TSU-NSRW

Interface of transport safety and transport security
  – Transport Safety—Security Interface TECDOC
  – Workshop (National / Regional / International)

**Scope**: Category 3, 4, and 5 radioactive sources and low-activity radioactive materials (including nuclear materials)
  
i.e. – prudent management practices, or prudent management practices plus basic transport security level measures
Overall Goal

Publication (TECDOC)

- [Completed] DPP approved by Coordination Committee following addressing of comments from NSOC, TSU, and IEC
- Develop a draft Transport Safety-Security Interface TECDOC
- Submit draft publication for consideration for publication by the IAEA

Workshop(s)

Develop materials to support workshops on the transport safety-security interface

Purpose:
- Create awareness by the participants of the interfaces between safety and security during the transport of low-activity radioactive sources
- Provide knowledge on IAEA safety and security requirements and recommendations for transport
- Assist participants with how to
  - assess packaging requirements
  - implement transport safety and security requirements
  - assess and deal with interfaces that either complement or conflict with each other
Based on all relevant IAEA publications

Structure:
1. Introduction
2. Terminology
3. Elements of a State’s Safety and Security Interfaces
4. Interface Considerations for Transport of Low-Activity Radioactive Material
5. Tools for Addressing the Transport Safety and Security Interface

APPENDIX I: Classification of Radioactive Material with the Appropriate UN Number for Proper Interfacing

APPENDIX II: Examples of Classification of Consignment of Low-Activity Radioactive Material

References
Contributors to Drafting and Review
• Terminology (e.g., shipper–receiver versus consignor–consignee)

• State-level Interfaces
  – Compares State–Operator considerations
  – (e.g., the State drafts requirements that do not compromise security or safety and the Operator provides experiences where conflicts exist to develop practical resolution)
Interface Consideration: Discussion of transport safety—security interface for 20 transport “tasks”

4.4 MANAGEMENT OF SECURITY-RELATED INFORMATION

The management of sensitive, security-related information can potentially introduce a transport safety/security interface conflict. The potential conflict involves the transmittal of transport-specific information to meet safety requirements that may conflict with the challenges of maintaining control of this information for security purposes.

Specifically, in some cases the transfer of information may conflict with the need to protect security-sensitive information which may only be shared with those having a “need to know”.

For transport safety, SSR-6 specifies detailed information that is to be included in the transport documentation, including shipment notifications that need to be made, and sets forth those entities that should possess the information in the transport documents. This documentation may include...

For transport security where only prudent management practices are to be applied, the operator should apply normal and sound business practices with respect to the manner by which it manages sensitive information.

For basic transport security level shipments, operators should take appropriate measures to protect sensitive information relating to transport operations, such as information on the schedule and route. Consideration may also need to be given to protecting other sensitive shipment information that could be used by an adversary to plan a malicious act.

Where transmitting information results in transport safety/security interface conflicts, the operator needs to coordinate its transport documents and other communications relating to a shipment with the relevant competent authorities to work around those conflicts. This will ensure that the information is transmitted and protected appropriately both for the purposes of security and safety.

More detailed guidance on protection of security-related information can be found in NSS-26-G Ref. [6].
Contents (cont.)

• Tools for addressing the interface
  – Process for operators: Decision chart
  – Example transport task questions to help operators resolve conflicts

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<th>4. Management of security-related information</th>
<th>The management of sensitive, security-related information can potentially introduce a transport safety/security interface conflict. The potential conflict involves the transmittal of transport-specific information to meet safety requirements that may conflict with the challenges of maintaining control of this information for security purposes. For example, for safety, relevant information has to be transmitted to various involved entities, and the transport may require advanced notification. For security reasons, sensitive information regarding the transport should be protected and only released on a need to know basis.</th>
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<td><strong>Question:</strong> Has sensitive information (e.g. route plan) been appropriately identified, protected and communicated?</td>
<td><strong>Question:</strong> Are shipping documents accurate and complete? <strong>Question:</strong> Is the information for safety and security kept in separate folders or places?</td>
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Way Forward

• A 4th consultancy meeting is scheduled for January 2018
• Review, revise, and propose a final draft of the draft, paying attention to:
  – Reviewing the text including consideration of the new revision of NSS No. 9 (NST044)
  – Ensuring the draft maximizes addressing of the interface
  – Improving the quality of tables and graphics
  – Including case studies and real-world interface examples
• Prepare the workshop agenda and lecture material, taking into account the
  – Need for international, regional and national workshops
  – Existing training materials for both safety and security
  – Draft interface document
Thank you!