

**SPESS F**  
**Document Preparation Profile (DPP)**  
**Version 2 dated 6 April 2018**

**1. IDENTIFICATION**

**Document Category:** Safety Guide

**Working ID:** DS515

**Proposed Title:** Compliance Assurance for the Safe Transport of Radioactive Material

**Proposed Action:** Revision of Safety Guide No. TS-G-1.5, Compliance Assurance for the Safe Transport of Radioactive Material, which was published in 2009

**Review Committee(s) or Group:** TRANSSC

**Technical Officer(s):** Eric H. Reber

**2. BACKGROUND**

Safety Guide No. TS-G-1.5, Compliance Assurance for the Safe Transport of Radioactive Material, was published in 2009. The objective of TS-G-1.5 is to assist competent authorities in the development and maintenance of compliance assurance programmes for the transport of radioactive material, and to assist applicants, licensees and organizations in their interactions with competent authorities. In order to increase cooperation between competent authorities and to promote the uniform application of international regulations and recommendations, it is desirable to adopt a common approach to regulatory activities. TS-G-1.5 is intended to assist in implementing such a uniform application by recommending most of the actions that should be included in the programmes of competent authorities for ensuring compliance with the Transport Regulations.

Since the publication of TS-G-1.5, the two publications in the Safety Requirements category that it primarily supports have been revised twice in the case of GS-R-1, and three times in case of TS-R-1. Revision of TS-G-1.5 is proposed to take account of revisions to several relevant publications that inform its content, and issues that have impacted the areas of its purview since its publication in 2009, including:

- revisions of the publications in the Safety Requirements category that it supports;
- revisions of other publications cited as references, e.g., Safety Standards Series No. GS-R-2, GS-R-3, TS-G-1.1 (Rev. 1), TS-G-1.3, and TS-G-1.4; IAEA's National Competent Authorities Responsible for Approvals and Authorizations in Respect of the Transport of Radioactive Material; IAEA's Training Course Series No. 1, Safe Transport of Radioactive Material; and IAEA's International Nuclear Verification Series No. 1 (Revised), Safeguards Techniques and Equipment;
- technological changes, and changes to the nature and scope of the transport of radioactive material;
- operational experience with the use of TS-G-1.5; and
- consideration of the safety/security interface.

This proposed revision of TS-G-1.5 is part of a plan (approved by TRANSSC) to revise all safety guides that support the Regulations for the Safe Transport of Radioactive Material, the most recent revision of which will be published in 2018.

### **3. JUSTIFICATION FOR THE PRODUCTION OF THE DOCUMENT**

Revision of TS-G-1.5 is overdue in that since its publication, the two publications in the Safety Requirements category that it primarily supports have been revised a total of five times. Due to a lack of resources and competing priorities, it has not been possible until now to revise this publication. Users of this publication will benefit from an updated version of the publication that is based on current safety standards, and takes account of recent operating experience, current technology, and the nature and scope of the transport of radioactive materials.

### **4. OBJECTIVE**

The objective of the proposed revision of TS-G-1.5 is to assist competent authorities in the development and maintenance of compliance assurance programmes for the transport of radioactive material, and to assist applicants, licensees and organizations in their interactions with competent authorities. In order to increase cooperation between competent authorities and to promote the uniform application of international regulations and recommendations, it is desirable to adopt a common approach to regulatory activities. This revision of TS-G-1.5 is intended to assist in implementing such a uniform application by recommending most of the actions that should be included in the programmes of competent authorities for ensuring compliance with the Transport Regulations.

This safety guide is intended to be used by competent authorities that are establishing or further developing programmes to ensure compliance with the Transport Regulations. The recommendations provided will also be useful to competent authorities with established programmes that are seeking greater harmony internationally in the implementation of the Transport Regulations. Additionally, the safety guide will assist users of the Transport Regulations in their interactions with competent authorities.

### **5. SCOPE**

The proposed safety guide will address radiation safety aspects of the transport of radioactive material; that is, the subjects that are covered by the Transport Regulations.

Measures for managing safety–security interfaces will be addressed in the proposed safety guide as necessary. Nuclear security issues, such as physical protection and nuclear material accounting and control will be mentioned in the proposed safety guide where they need to be taken into account when considering regulatory programmes for ensuring the safe transport of radioactive material, but reference will be made to the Nuclear Security Series for guidance on these topics.

### **6. PLACE IN THE OVERALL STRUCTURE OF THE RELEVANT SERIES AND INTERFACES WITH EXISTING AND/OR PLANNED PUBLICATIONS**

The proposed publication will be a specific safety guide in the group of safety standards on the safe transport of radioactive material. This safety guide will primarily provide guidance on implementing the requirements in General Safety Requirements No. GSR Part 1 (Rev. 1), Governmental, Legal and Regulatory Framework for Safety, and Safety Standards Series No. SSR-6, Regulations for the Safe Transport of Radioactive Material, for ensuring compliance with regulatory requirements on the transport of radioactive material.

A section of this publication will address the safety security interface.

The drafting process for this publication will be managed by RIT/NSRW. Regarding the section on the safety/security interface, the Nuclear Security of Materials and Facilities Section will be consulted.

It is not expected that other organizations will co-sponsor this publication.

It is expected that the current version of the following publications will be referenced in this publication:

- INTERNATIONAL ATOMIC ENERGY AGENCY, Regulations for the Safe Transport of Radioactive Material, 2018 Edition, IAEA Safety Standards Series No. SSR-6, IAEA, Vienna (2018).

- INTERNATIONAL ATOMIC ENERGY AGENCY, Leadership and Management for Safety, IAEA Safety Standards Series No. GSR Part 3, IAEA, Vienna (2016).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety, IAEA Safety Standards Series No. GSR Part 1 (Rev. 1), IAEA, Vienna (2016).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Application of the Management System for Facilities and Activities, IAEA Safety Standards Series No. GS-G-3.1, IAEA, Vienna (2006).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Preparedness and Response for a Nuclear or Radiological Emergency, IAEA Safety Standards Series No. GSR Part 7, IAEA, Vienna (2015).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Planning and Preparing for Emergency Response to Transport Accidents Involving Radioactive Material, IAEA Safety Standards Series No. TS-G-1.2 (ST-3), IAEA, Vienna (2002) (under revision as DS469).
- INTERNATIONAL ATOMIC ENERGY AGENCY, National Competent Authorities Responsible for Approvals and Authorizations in Respect of the Transport of Radioactive Material, IAEA, Vienna (2008), <http://www-ns.iaea.org/downloads/rw/radiation-safety/competent-authoritieslist2008.pdf>
- INTERNATIONAL CIVIL AVIATION ORGANIZATION, Technical Instructions for the Safe Transport of Dangerous Goods by Air, ICAO, Montreal (2016).
- INTERNATIONAL MARITIME ORGANIZATION, International Maritime Dangerous Goods Code (IMDG Code), IMO, London (2016).
- UNIVERSAL POSTAL UNION, Universal Postal Convention of Rio de Janeiro, UPU, Berne (1979).
- UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE, European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) and Protocol of Signature, UNECE, Geneva (1957).
- CENTRAL OFFICE FOR INTERNATIONAL TRANSPORT BY RAIL, Convention relative aux transports internationaux ferroviaires (COTIF), OCTI, Berne (1980).
- CENTRAL COMMISSION FOR THE NAVIGATION OF THE RHINE, Règlement pour le transport de matières dangereuses sur le Rhin (ADNR), CCDR, Strasbourg (2007).
- MERCOSUR/MERCOSUL, Acuerdo sobre Transporte de Mercancías Peligrosas en el Mercosur/Acordo sobre Transporte de Mercadorias Perigosas no Mercosul, Argentina, Brasil, Paraguay y Uruguay (1994).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Safeguards Techniques and Equipment: 2011 Edition, International Nuclear Verification Series No. 1 (Rev. 2), IAEA, Vienna (2011).
- INTERNATIONAL ATOMIC ENERGY AGENCY, The Convention on the Physical Protection of Nuclear Material, INFCIRC/274/Rev.1/Mod.1, IAEA, Vienna (2016); The Physical Protection of Nuclear Material and Nuclear Facilities, INFCIRC/225/Rev.5, IAEA, Vienna (2011).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Convention on Early Notification of a Nuclear Accident and Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, Legal Series No. 14, IAEA, Vienna (1987).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material (2012 Edition), IAEA Safety Standards Series No. SSG-26, IAEA, Vienna (2014).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Radiation Protection Programmes for the Safe Transport of Radioactive Material, IAEA Safety Standards Series No. TS-G-1.3, IAEA, Vienna (2007).
- INTERNATIONAL ATOMIC ENERGY AGENCY, The Management System for the Safe Transport of Radioactive Material, IAEA Safety Standards Series No. TS-G-1.4, IAEA, Vienna (2008).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Safe Transport of Radioactive Material, Fourth Edition, Training Course Series No. 1, IAEA, Vienna (2006).

- INTERNATIONAL ATOMIC ENERGY AGENCY, Security in the Transport of Radioactive Material, IAEA Nuclear Security Series No. 9, IAEA, Vienna (2008). **[NB: This reference will change once NST044, NSS No. 9 Rev. 1 is published (expected end of 2018)]**
- INTERNATIONAL ATOMIC ENERGY AGENCY, Security of Nuclear Material in Transport, IAEA Nuclear Security Series No. 26-G, IAEA, Vienna (2015).

## 7. OVERVIEW

The outline of the publication will be similar to that of the publication that is being revised, with the inclusion of a section on the safety/security interface.

### CONTENTS

#### 1. INTRODUCTION

- Background
- Objective
- Scope
- Structure

#### 2. RESPONSIBILITIES AND FUNCTIONS OF THE COMPETENT AUTHORITY

- Regulatory basis
- Legal basis
- Interlinked responsibilities
- Organization and responsibilities of the competent authority
- Information, guidance and training
- Independent assessment
- Resources
- Training of employees
- Emergency preparedness and response
- List of national competent authorities
- Liaison by the competent authority with other government agencies
- Safety/Security Interface

#### 3. REGULATIONS AND GUIDES

- General
- National regulations and guides
- International regulations and guidance

#### 4. COMPLIANCE ASSURANCE

- General
- Providing for compliance assurance
- Methods of assurance and inspection
- Issuing of approvals by the competent authority
- Special form radioactive material and low dispersible radioactive material
- Packages requiring competent authority approval and package design assessment
- Approval of shipments under special arrangement
- Packages not requiring approval by the competent authority
- Identification of packages and serial numbers of packagings
- Radiation protection
- Radioactive material having other hazardous properties
- The management system in support of compliance assurance
- Transport inspections
- Responsibilities and actions of consignors
- Actions and operations of carriers
- Additional responsibilities
- Design assessments
- Testing
- Control of manufacture
- Maintenance and servicing arrangements
- Accidents
- Emergency response
- Distribution of information

Training and job related skills  
Maintenance of regulations and feedback to the competent authority  
Enforcement actions and investigations of incidents

5. APPROVALS AND APPROVAL CERTIFICATES

Applications for approvals  
Provision of guidance for applicants  
Types of approval  
Multilateral approval

6. INTERNATIONAL COOPERATION BETWEEN COMPETENT AUTHORITIES CONCERNING PACKAGES AND SHIPMENTS ON FOREIGN TERRITORY

International cooperation relating to compliance assurance  
Packages and shipments of foreign origin that are subject to multilateral approval  
Packages and shipments of foreign origin that do not require notification of the competent authority

REFERENCES

NOTE ON ANNEXES

ANNEX I: EXAMPLE OF THE ORGANIZATION OF A COMPLIANCE ASSURANCE PROGRAMME

ANNEX II: INFORMATION TO BE INCLUDED IN THE GUIDE FOR APPLICATIONS FOR APPROVALS

ANNEX III: EXAMPLES OF TEMPLATES FOR APPROVAL CERTIFICATES FOR USE BY THE  
COMPETENT AUTHORITY

ANNEX IV: MODEL OF COMPETENT AUTHORITY PROCEDURES FOR AUDITING A MANAGEMENT  
SYSTEM

ANNEX V: EXAMPLE/MODEL OF A CHECKLIST FOR AUDITING A MANAGEMENT SYSTEM

ANNEX VI: EXAMPLE/MODEL OF A CHECKLIST FOR INSPECTING TRANSPORT  
DOCUMENTATION

ANNEX VII: EXAMPLE/MODEL OF A CHECKLIST FOR INSPECTING TRANSPORT OPERATIONS

ANNEX VIII: EXAMPLE/MODEL OF A CHECKLIST FOR INSPECTING THE MANUFACTURING  
OF PACKAGINGS

ANNEX IX: EXAMPLE/MODEL OF A CHECKLIST FOR INSPECTING MAINTENANCE AND SERVICE  
OPERATIONS

CONTRIBUTORS TO DRAFTING AND REVIEW

BODIES FOR THE ENDORSEMENT OF IAEA SAFETY STANDARDS

**8. PRODUCTION SCHEDULE:** Provisional schedule for preparation of the document, outlining realistic expected dates for each step (*fill the column corresponding to your proposed document and delete the other columns*):

	A*	B*	C*
STEP 1: Preparing a DPP	DONE	DONE	DONE
STEP 2: Approval of DPP by the Coordination Committee	Q2, 2018		
STEP 3: Approval of DPP by the relevant review Committees	Q4, 2018		
STEP 4: Approval of DPP by the CSS	Q2, 2019		
STEP 5: Preparing the draft Indicate as to whether a TM is expected to be organized for the preparation of the draft	Q3, 2018 – Q2, 2019		
STEP 6: Approval of draft by the Coordination Committee	Q3, 2019		
STEP 7: Approval by the relevant review Committees for submission to Member States for comments	Q4, 2019		
STEP 8: Soliciting comments by Member States	Q1, 2020		
STEP 9: Addressing comments by Member States	Q1, 2020		
STEP 10: Approval of the revised draft by the Coordination Committee Review in NSOC-SGDS (Technical Editorial review)	Q2, 2020		
STEP 11: Approval by the relevant review Committees	Q4, 2020		
STEP 12: - Submission to the CSS - Submission in parallel and approval by the Publications Committee - MTCD Editing - Endorsement of the edited version by the CSS	Q2, 2021		
STEP 13: Establishment by the Publications Committee and/or Board of Governors (for SF and SR only)	N/A		
STEP 14: Target publication date	Q4, 2021		

\*

- *Column A for Safety Fundamentals, Safety Requirements and Safety Guides.*
- *Column B for Nuclear Security Series publications*
- *Column C for TECDOCs, safety reports and other publications*

## 9. RESOURCES

Estimated resources involved by the Secretariat (person-weeks) and the Member States (number and type of meetings)

Three one-week consultancy meetings

Two six-week home based assignments

Secretariat: 12 person-weeks