# SPESS F Document Preparation Profile (DPP) Version [1] dated [2016-01-25]

#### 1. IDENTIFICATION

Document Category or set of publications to be revised in a concomitant manner

**Safety Guide** 

Working ID: DS496

Proposed Title: Advisory Material for the IAEA Regulations for the Safe Transport of

Radioactive Material (20xx Edition)

**Proposed Action:** Revision of a publication

Advisory Material for the IAEA Regulations for the Safe Transport of

Radioactive Material (2012 Edition), 2014, SSG-26

Review Committee(s) or Group: TRANSSC, NSGC

Technical Officer(s): Nancy Capadona, Stephen Whittingham

#### 2. BACKGROUND

Transport is deemed to comprise all operations and conditions associated with and involved in the movement of radioactive material; these include the design, fabrication and maintenance of packaging, and the preparation, consigning, handling, carriage, storage in transit and receipt at the final destination of packages. On a national basis, millions of packages containing radioactive material are transported annually.

Since 1961 the International Atomic Energy Agency, within the framework of its statutory functions and in accordance with recommendations made by its Preparatory Commission and by the Economic and Social Council of the United Nations, publishes the Regulations for the Safe Transport of Radioactive Material.

As experience in applying the Regulations grew, it became increasingly evident that, while the provisions of the Regulations might be essentially clear and unambiguous, they would often also be highly technical in nature and unavoidably complex. Therefore, there is a need for a publication to supplement the Regulations that could give information on individual provisions as to their purpose, their scientific background and how to apply them in practice. The recommendations are to apply to all modes of transport..

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

To remain consistent with the review cycles of the UN Committee of Experts (which produces "model regulations" for the transport of all dangerous goods) and the various international modal organizations (which produce mode-specific dangerous goods regulations), a new review cycle began in 2015.

TRANSSC at its meeting in Nov. 2015 decided that the issues identified met the decision criteria to start a new revision cycle for SSR-6. With this conclusion, TRANSSC consensus was to enter a revision cycle.

In the 25<sup>th</sup> CSS meeting, some CSS members noted that in future the Transport Regulations and the supporting guidance in TS-G-1.1 (now SSG-26) be issued at the same time. Mr Lacoste, Chairman of NS-SPESS F DPP-V.10- 6 July 2015

the Commission at that time, in his conclusion requested TRANSSC to consider the need to update related safety guides concurrently with revisions of TS-R-1 (SSR-6).

Consequently it is hereby intended concurrently revise the SSR-6 Regulations and the associated advisory material SSG-26.

#### 4. OBJECTIVE

This Safety Guide will continue to provide recommendations on proven means of achieving and demonstrating compliance with Transport Regulations.

The Regulations state 'what' must be achieved in relation to package characteristics and operational conditions in order to assure safety and do not seek to prescribe 'how' the user should comply. An additional source of information on the Regulations, providing advice on 'how' to comply with them was therefore developed and published as "Advisory" material supplementing the Transport Regulations.

#### 5. SCOPE

As well as the SSR-6, the SSG-26 applies to the transport of radioactive material by all modes on land, water, or in the air. Transport comprises all operations and conditions associated with, and involved in, the movement of radioactive material; these include the design, manufacture, maintenance and repair of packaging, and the preparation, consigning, loading, carriage including in-transit storage, unloading and receipt at the final destination of loads of radioactive material and packages.

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

- Safety Standards Committee: TRANSSC will co-ordinate the review process;
- Other Safety Series and Safety Standards Series documents that have a direct interface with Advisory Material are:
  - SSR-6 "Regulations for the Safe Transport of Radioactive Material" (20xx Edition)
  - SSG-33 "Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material" (2015)
  - TS-G-1.2 "Emergency Response Planning and Preparedness for Transport Accidents Involving Radioactive Material" (2002 edition)
  - TS-G-1.3 "Radiation Protection Programmes for Transport of Radioactive Material" (2007)
  - TS-G-1.4 "Management System for the Safe Transport of Radioactive Material" (2008)
  - TS-G-1.5 "Compliance Assurance for the Safe Transport of Radioactive Material" (2009)
  - GSR Part 3, "Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards" (2014)

Interfaces also exist with all Member States and with involved international organizations.

- Member States: Requests for proposals for change, and a summary of proposed changes are sent
  to all Member States. The Member States then have the opportunity to participate in the review
  process through TRANSSC and provide further support through related Technical Meetings and
  Consultant Services.
- International Organizations: Liaison with other organizations for the development of SSG-26 include:
  - United Nations Economic and Social Council (UN/ECOSOC)
  - International Civil Aviation Organization (ICAO)
  - International Maritime Organization (IMO)
  - UN/ECE/Inland Transport Committee's International Regulations Concerning the Carriage of Dangerous Goods by Rail (RID), European Agreement Concerning the International Carriage of

Dangerous Goods by Road (ADR), and European Agreements on the International Carriage of Dangerous Goods by Inland Waterways (ADNR)

- International Federation of Airline Pilots Associations (IFALPA)
- International Air Transport Association (IATA)
- International Standards Organization (ISO)
- European Commission (EC)
- Universal Postal Union (UPU)
- World Nuclear Transport Institute (WNTI)

#### 7. OVERVIEW

The Advisory Material is not a stand-alone text. It only has significance when used concurrently as a companion to the IAEA Safety Standards Series No. SSR-6 and each paragraph of this guide is numbered correspondingly to the paragraph of the Regulations to which it most directly relates.

The Table of Contents of the current edition of the "Advisory Material" will serve as the basis for the new edition and is as follows:

Section I	Introduction		
Section II	Definitions		
Section III	General Provisions		
Section IV	Activity Limits and Classification		
Section V	Requirements and Controls for Transport		
Section VI	Requirements for Radioactive Materials and for Packagings and Packages		
Section VII	Test Procedures		
Section VIII	Approval and Administrative Requirements		
Appendix I	The Q System for the Calculation and Application of A1 and A2 Values		
Appendix II	Half-life and Specific Activity of Radionuclides, Dose and Dose Rate Coefficients of Radionuclides and Specific Activity		
Appendix III	Example Calculations for Establishing Minimum Segregation Distance Requirements		
Appendix IV	Package Stowage and Retention During Transport		
Appendix V	Guidelines for Safe Design of Shipping Packages Against Brittle Fracture		
Appendix VI	Criticality Safety Assessments		
Appendix VII	Guidance for Transport of Large Components under Special Arrangement		
Appendix VIII	Transport under Specific Situations		

Index

Contributors to Drafting and Review

**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	MAR-2016		
Committee			
STEP 3: Approval of DPP by the relevant review	JUN-2016		
Committees			
STEP 4: Approval of DPP by the CSS	NOV-2016		
STEP 5: Preparing the draft	FEB-2017		
Indicate as to whether a TM is expected to be organized			
for the preparation of the draft			
STEP 6: Approval of draft by the Coordination	MAR-2017		
Committee			
STEP 7: Approval by the relevant review Committees for	JUN-2017		
submission to Member States for comments			
STEP 8: Soliciting comments by Member States	DEC-2017		
STEP 9: Addressing comments by Member States	FEB-2018		
STEP 10: Approval of the revised draft by the	MAR-2018		
Coordination Committee			
Review in NS-SSCS			
STEP 11: Approval by the relevant review Committees	JUN-2018		
STEP 12: Endorsement by the CSS	NOV-2018		
STEP 13: Establishment by the Publications Committee			
and/or Board of Governors (for SF and SR only))			
STEP 14: Target publication date	2019		

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- Column A for Safety Fundamentals, Safety Requirements and Safety Guides.
- Column B for Nuclear Security Series publications noting that for Technical Guides a fast track may be proposed and justified for approval by the NSGC at step 3. If approved, the draft will not be subject to the steps 4 to 10 and, be provided at step 11 to the NSGC to take note of it before its publication
- 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)