

Explanatory Note

Regulations for the Safe Transport of Radioactive Material (DS543)

The draft text for review, entitled *Regulations for the Safe Transport of Radioactive Material, 20xx Edition*, was prepared as a draft Safety Requirements publication to be issued in the IAEA Safety Standards Series. The Review Cycle for 2018 edition of the Transport Regulations (IAEA Safety Standards Series No. SSR-6 (Rev. 1)) was initiated with the issuance of a Note Verbale on 5 November 2021, which invited all Member States to submit proposals for changes to SSR-6 (Rev. 1). In response, over 300 proposals were submitted. At its meeting in November/December 2022, the Transport Safety Standards Committee (TRANSSC) decided that, based on the proposals that were submitted, there was sufficient justification for revising SSR-6 (Rev. 1), and a Revision Cycle was initiated. In accordance with the 2021 Transport Regulations Revision Quality Plan, only proposals that were submitted in response to the 5 November 2021 Note Verbale before the deadline of 18 March 2022 would be considered in the Revision Cycle. Proposals submitted after this deadline may be considered in a future Review/Revision Cycle.

The proposals for changes to SSR-6 (Rev. 1) have been reviewed and developed by TRANSSC at three of its regular meetings. The draft text has been reviewed by the Emergency Preparedness and Response Standards Committee (EPReSC), the Nuclear Safety Standards Committee (NUSSC), the Radiation Safety Standards Committee (RASSC), TRANSSC, the Waste Safety Standards Committee (WASSC), and the Nuclear Security Guidance Committee (NSGC).

Table 2 of the draft SSR-6 (Rev. 2) includes proposed changes to approximately 64% of the A_1 values and 45% of the A_2 values. These revised values are based on the work of TRANSSC's A_1/A_2 Working Group, which conducted a review of the calculations on which the current A_1 and A_2 values are based and recommended revised values that take account of current dose coefficients and modelling techniques, as well as updated radiological data. The details of the calculation methods and findings of the A_1/A_2 Working Group are provided in the most recent report of its activities that is available in the Revision Cycle of SSR-6 (Rev. 1) [web folder](#). As a result of discussions held during the meeting of RASSC in November 2023, a joint RASSC/TRANSSC Working Group was initiated which will consider the details of the calculation methods of the A_1/A_2 Working Group, the justification for the proposed changes to the A_1 and A_2 values and the potential impact of revised A_1 and A_2 values on other IAEA safety standards. The conclusions reached by the joint RASSC/TRANSSC Working Group will be considered during the development of the draft SSR-6 (Rev. 2).

The objective of this draft text is to establish requirements for the protection of persons, property and the environment from harmful effects of radiation during the transport of radioactive material. This protection is achieved by requiring: (a) containment of the radioactive contents; (b) control of external radiation levels; (c) prevention of criticality; and (d) prevention of damage caused by heat. These requirements are satisfied firstly by applying a graded approach to contents limits for packages and conveyances and to performance standards applied to package designs depending upon the hazard of the radioactive contents. Secondly, they are satisfied by imposing requirements on the design and operation of packages and on the maintenance of packaging, including consideration of the nature of the radioactive contents. Finally, they are satisfied by establishing administrative controls, including, where appropriate, approval by competent authorities.

Comments are requested in relation to:

- Relevance and usefulness — Are the stated objectives appropriate, and are they met by the draft text?
- Scope and completeness — Is the stated scope appropriate, and is it adequately covered by the draft text?

- Quality and clarity — Do the requirements/guidance in the draft text represent the current consensus among specialists in the field, and are they expressed clearly and coherently?
- Revised A1/A2 values — Do you have any specific comments in relation to the justification for, or impact of, the proposed revised values?

Comments of an editorial nature will be considered; however, it should be noted that the draft text will be comprehensively edited by the IAEA Secretariat.

Any comments should be made in English, should refer to the relevant paragraph number in the draft text being reviewed, and should propose alternative text where appropriate. Please use the attached Form for Comments to record all comments.

The responsible IAEA officer is Mr Eric Reber of the Department of Nuclear Safety and Security, who may be contacted for further information in connection with this subject by telephone at: +43 1 2600 24486 or via email at: E.Reber@iaea.org.

Any comments should be sent through the established official channels to the responsible IAEA officer by **8 May 2024**.

Form for Comments
Regulations for the Safe Transport of Radioactive Material (DS543)

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer:				Page.... of....			
Country/Organization:				Date:			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection

Statement by the Commission on Safety Standards

Publications in the IAEA Safety Standards Series are prepared and reviewed in accordance with a uniform process. To this end, the Commission on Safety Standards (CSS) and five committees with harmonized terms of reference — the Emergency Preparedness and Response Standards Committee (EPRaSC), the Nuclear Safety Standards Committee (NUSSC), the Radiation Safety Standards Committee (RASSC), the Transport Safety Standards Committee (TRANSSC) and the Waste Safety Standards Committee (WASSC) — have been established. The CSS has a special overview role with regard to the IAEA's safety standards and provides advice to the Director General on the IAEA's overall programme with regard to regulatory aspects of safety.

The uniform preparation and review process involves organizing expert group meetings; arranging at different stages of preparation for the internal review of draft texts; submitting the texts to the relevant Committee(s) for review; submitting draft texts to the IAEA's Member States for comment; and submitting the approved final draft of the safety standard¹ for endorsement by the CSS before publication.

The CSS stresses the importance of Member States' comments to the preparation and review process for safety standards. Publications in the IAEA Safety Standards Series not only should be of the requisite quality but also should represent the consensus view of the Member States and should address the issues of importance to the Member States. While the CSS, the Committees and the Secretariat strive to provide safety standards that satisfy these criteria, the review of draft standards by experts in the Member States is an essential stage in obtaining the broadest possible technical consensus and the highest possible quality and relevance.

Member States are also encouraged to provide the IAEA with feedback on their use of the safety standards. The status of safety standards extant and in preparation can be seen on the IAEA's website, where there are also links to electronic files for existing publications, including those in other official languages.² The responsible IAEA officer is Mr Dominique Delattre, Head of the Safety and Security Publications Unit of the Department of Nuclear Safety and Security. He may be contacted for further information in connection with this subject by telephone at: + 43 1 2600 22696 or via email at: D.Delattre@iaea.org.

¹ Safety Guides are published under the authority of the Director General. Safety Fundamentals and Safety Requirements publications require the approval of the Board of Governors, after endorsement by the CSS.

² See <http://www-ns.iaea.org/committees/files/CSS/205/status.pdf>.