



**world nuclear  
transport institute**

# **International Atomic Energy Agency (IAEA)**

---

## **51<sup>st</sup> Meeting of Transport Safety Standards Committee (TRANSSC-51)**

**WNTI Meeting Report**

---

**Date: 4-7 November 2025**

**Location: International Atomic Energy Agency, Vienna**

---

## SUMMARY MEETING REPORT

<b>HOST ORGANISATION:</b>	IAEA
<b>MEETING TITLE:</b>	51 <sup>st</sup> Meeting of Transport Safety Standards Committee (TRANSSC-51)
<b>LOCATION:</b>	International Atomic Energy Agency, Vienna, Vienna International Center (VIC) Board Room A, M building, 2nd floor
<b>DATE:</b>	04-07 November 2025
<b>REPORT BY:</b>	Elisa PENDA

### Participants / Attendees:

WNTI representatives were as follows:

- TRANSSC plenary sessions Steven Crane, Daiichiro Ito, Franz Kattner, Thierry Miquel, Joel Kruehler, Pierre Malesys and Elisa Penda
- TTEG-Criticality meeting: Daiichiro Ito (part time). and Pierre Malesys
- TTEG-Package Performance Assessment meeting: Franz Kattner and Joel Kruehler.
- TTEG-Operational Matters meeting: Thierry Miquel, Steven Crane and Elisa Penda.
- TTEG-Radiation Protection meeting: Daiichiro Ito and Florian Darras (who attended the TRANSSC plenary sessions as a representative of the International Organisation for Standardization (ISO) and also represented WNTI activities during this TTEG-Radiation Protection meeting).
- WNTI Members, Marc-Andre Charette, Peter Suter and Mark Campbell, also attended the plenary meetings and certain TTEG meetings as members of the delegations from Canada, Switzerland and World Nuclear Association, respectively.
- Testing a new format of Agenda in TRANSSC-50: TRANSSC meeting on Tuesday to Thursday/Friday and TTEGs on Monday and Tuesday morning, under the responsibility of their Chairs

### Purpose / Objectives of Meeting

- The primary objective of the TRANSSC at the IAEA is to develop, revise, and harmonize safety standards for the transport of radioactive material. It ensures that these standards provide a high level of protection for people, property, and the environment during transport.

NOTE: The final agenda, the list of attendees and all presentations and documents can be found on the TRANSSC member's website [TRANSSC-51 web folder](#).

### Outcomes

#### 1-Participation & Opening

- **74** participants, from **27** countries and **7** international organizations, registered to the meeting, including new TRANSSC members from Argentina, Czech Republic, Ukraine, United Arab Emirates.
- Key Messages from the Opening Remarks (Karine Herviou, IAEA Deputy Director General and Head of the Department of Nuclear Safety and Security):
  - TRANSSC's central role reaffirmed in maintaining a harmonized international framework for the safe transport of radioactive material and sustaining public confidence.
  - SSR-6 Rev. 2 milestone highlighted, with Board of Governors approval imminent and appreciation expressed for TRANSSC, Member States, and Secretariat contributions.
  - Forward-looking regulatory approaches emphasized to address emerging technologies, including SMRs, transportable nuclear power plants, and evolving transport systems.

- TTEGs to continue: Secretariat will maintain facilitation of Technical Expert Group meetings under alternative platforms (ad-hoc working groups, technical meetings, consultancy meetings, conferences) which will continue to support technical dialogue until a long-term structure is agreed.
  - TRANSSC invited to contribute to the review of the SPSS process and to the development of a long-term safety standards plan reflecting Member State needs and technological evolution
- **Approved** 51st TRANSSC Meeting Agenda
  - **Approved** report of the 50th TRANSSC Meeting
  - **Approved** Report of Joint Meeting of the Radiation Safety Standards Committee (RASSC#58) and the Transport Safety Standards Committee (TRANSSC#50) held on 25th June 2025
  - **Shared** the [Status of Actions arising from the 50th TRANSSC Meeting.pptx](#)

## 2-Progress on Safety Standards Lead by TRANSSC

### Summary Table

ID	Title	Publication	Review/Revision	Target date
SSR-6	Regulations for the Safe Transport of Radioactive Material 2018 Edition	xxxx	DS543 - ongoing	2025 / 2026
SSG-26	Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material	xxxx	DS554 - ongoing	2027 / 2028
SSG-33	Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material	2021	planned for 2026	2028 / 2029
SSG-86	Radiation Protection Programmes for the Transport of Radioactive Material	2023	recently published	long term
TS-G-1.4	The Management System for the Safe Transport of Radioactive Material	2008	DS530 - ongoing	2028/2029
SSG-78	Compliance Assurance for the Safe Transport of Radioactive Material	2023	recently published	-
SSG-65	Preparedness and Response for a Nuclear or Radiological Emergency Involving the Transport of Radioactive Material	2022	recently published	-
SSG-66	Format and Content of the Package Design Safety Report for the Transport of Radioactive Material	2022	recently published	-
DS546: SSG-94	Ageing Management and Maintenance of Radioactive Material Transport Packages	xxxx	DS546 - ongoing	2026
TECDOC-XXXX	Safety Basis for Regulations for Safe Transport of Radioactive Material (XXXX Edition)	xxxx	ongoing	2026 / 2027
TCS 1	Safe Transport of Radioactive Material, Fourth Edition	2006	ongoing	2026
TECDOC-XXXX	A1/A2 methodology	xxxx	planned for 2026	2028

- **SSG-26 (Rev.2) "Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material"**
  - Major consolidation underway; historical and technical basis information moved to a separate Safety Basis Document (SBD)
  - Draft (Step 5) to TRANSSC in June 2026 (Note: this was the information from the Head of the Transport Safety Unit, whereas the Technical Officer in charge of this publication announced later that this target seems optimistic), publication planned Q4 2028
  - Consultancy meeting scheduled for November 2025
  - Future revision to run in parallel with SSR-6 revision
- **SSG-33 (Rev2) "Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material (2018 Edition)"**
  - DPP submission planned Q2 2026.
  - Potential transformation into an interactive online resource to enhance accessibility and maintenance.
- **TS-G-1.4 DS-530 (SSG-XX?) "The Management System for the Safe Transport of Radioactive Material"**
  - Currently in Step 5; publication expected Q4 2028.
  - Proposal to consolidate into a single General Safety Guide with topic-based annexes (e.g. transport, nuclear installations, radioactive waste)
- **SSG-65 "Preparedness and Response for a Nuclear or Radiological Emergency Involving the Transport of Radioactive Material"**
- **SSG-66 "Format and Content of the Package Design Safety Report for the Transport of Radioactive Material"**
- **SSG-78 "Compliance Assurance for the Safe Transport of Radioactive Material"**
- **SSG-86 "Radiation Protection Programmes for the Transport of Radioactive Material"**
  - These four safety guides were published in 2022/23; the next review is planned around 2028 based on Member State feedback
- **SSR-6 Rev 2 draft** presented to the IAEA Board of Governors during its 17–21 November 2025 meeting, received approval

- **SSR-6 (Rev. 2) Review and Revision:** Whereas according to the Board of Governors policy the review of SSR-6 (Rev. 2) should start in 2026, under the IAEA proposal for long term strategy of TRANSSC the Secretariat suggested to initiate the next formal review of SSR-6 early 2030, one year after the publication of the Modal Regulations. There was no agreement from the Member States on this suggestion. No decision was taken and this should be discussed again during next TRANSSC-52 meeting.

### 3-Review of draft DPPs and safety standards

- **DS539** - Licensing Process for Nuclear Installation (Revision of SSG-12) - Step 11 approved – To be moved to Step 12.
- **DS547** - Regulatory Experience Feedback Management (New publication) - Step 11 approved - To be moved to Step 12.
- **DS562** - Safety of Nuclear Power Plants: Design (Revision of SSR-2/1) - Step 3 (DDP) approved.
- **NST-076** - Computer Security of Operational Technologies and Instrumentation and Control Systems for Nuclear Security (Revision of NSS No. 33-T) - Step 3 (DPP) approved.
- **DPP for the NE Basic Principles:**
  - Since 2008, the global nuclear landscape has evolved significantly, driven by newcomer programmes, long-term operation of existing fleets, post-Fukushima safety expectations, climate change imperatives, the UN SDGs, emerging reactor and fuel cycle technologies, renewed focus on energy security, and the growing need for harmonized international requirements.
  - Basic Principles and Objectives will be revised to flexibly adapt the dynamic changes in the Member States’ needs and in the nuclear industry
  - The revision process will take a phased approach which first revises the Nuclear Energy Basic Principles and then 4 Nuclear Energy Objectives respectively. The revision of the Nuclear Energy Basic Principles is planned for completion by the end of 2026
- **Outcomes of the Review of GSR Part 1 (Rev. 1)**
  - The IAEA will continue to collect and analyse feedback, including as part of the IRRS programme
  - A new review of GSR Part 1 (Rev. 1) will be conducted in five years, unless other major needs for change are identified in the meantime, that require an earlier revision

### 4-Progress on TRANSSC Working Group and Ad-hoc Working Groups (WGs)

- **Working Paper 2: Report Online TRANSSC Working Group on Harmonized Implementation of SPESS Process**
  - The objective of the group was to define a path forward to ensure that TRANSSC operates as an independent review committee fully aligned with the Terms of Reference (ToRs) of Safety Standards Committees (SSCs) while identify ways to benefit from TTEGs.
  - Working Paper 2 on SSR-6 review paused to give priority of SPESS review/revision
  - Collect Review Committee feedback during Q1–Q2 2026 on proposals to improve SPESS B efficiency and establish a process for reviewing Safety Standards (Agenda item 4)
- **TRANSSC Ad-hoc Working Groups (WGs)**

Ad-hoc Working Groups (WGs)	Chair	Task	Volunteered TRANSSC Members and Observers
Transport of Radiopharmaceuticals Used for Targeted Alpha Therapy.	Germany	Germany will update the ToR to include justification for RASSC involvement. The Secretariat will share updated ToR with RASSC Secretariat and request an agenda item to be added to RASSC-59 meeting.	Belgium, Canada (observer), France, Germany, Japan, UK, USA (to be confirmed), ISO, ISSPA, WNTI.
Features Added to the Package During Transport,	France	The Ad-hoc WG has developed a questionnaire for the survey to collect feedback from IAEA MS on the implementation of SSR-6 Para 612 (attached).	Canada, China, France (Member or Alternate to be confirmed for the Chair), Japan, Germany Pakistan, WNTI.

## TTEGs Report to TRANSSC

- **TTEG Criticality**
  - The Secretariat will organize a virtual CSM on CSI limits for sea-going vessels during Q2-Q4 2026.
  - The Secretariat will coordinate with IMO to seek expertise on related maritime issues.
  - See TTEG-C workplan dated 04/11/2025 for the others pending subjects
- **TTEG- Operational Matters**
  - TRANSSC approved the establishment of a Correspondence Group for the development of guidance on transport of SCO-III. The first online meeting is planned to be held in November 2025. Canada, Belgium, Spain, Japan, Italy, Germany, Netherlands, WNTI and Switzerland are interested in participating.
  - TTEG-OM agreed that the document type (e.g. Safety Guide or TECDOC) should be decided after developing the draft of the guidance.
- **TTEG- Package Performance and Assessment (see above)**
  - The expected outcomes for the Ad-hoc Working Group on Features Added to the Package During Transport (hereinafter, referred to as “the Ad Hoc Working Group”) are the results of the questionnaire and the clarification of that matter within the Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material (SSG–26) or, if necessary, the IAEA Regulations for the Safe Transport of Radioactive Material (SSR-6) themselves. UK highlighted the need for the consideration of “human factors” in the regulations. It was agreed that UK will provide a new idea and approach the next TTEG-PPA meeting, especially where and to what extent human factors could be implemented in IAEA documents. Any support from other countries is welcomed by providing names of specialists willing to join and by providing existing documentation to share practices.
- **TTEG-Radiation Protection:**

The following items of the TTEG RP agenda were addressed to TRANSSC committee (***no Action Defined at this Stage***):

  - The creation of ad-hoc WG to analyse the possibility of an exception allowing the use of alternative A2 values for a small set of radionuclides used for medical treatment. (hereinafter, referred to as “the Ad Hoc Working Group”)
  - The status of the TECDOC on the update of the Q system;
  - the creation of 3 WGs on TI (Transport Index) concept, LTAE (Low Toxicity Alpha Emitter) definition and LSA-II definition
  - The application of the 10-year transitional period introduced in the next revision of SSR-6 (It is proposed that this issue is better to be discussed in TTEG-OM.)
  - TTEG-C presented their work on the paragraph 106 (scope of the regulations) of SSR-6 to seek opinion of the of the TTEG-RP.
- **NORMEX-WG:**
  - The NORMEX Working Group convened in a hybrid format to review progress on the calculation (sea, air) and modelling of exposure scenarios (and additional scenarios and radon exposure) for Naturally Occurring Radioactive Material (NORM) transport.
  - Upon completion of all calculations, the Working Group will compile the results and findings into a formal report, this report will be presented to TRANSSC for review and to determine the appropriate form of publication.

## General Topics Issues

- **Member State and IAEA presentations provided which were posted on [TRANSSC-51 web folder](#).**
- **Denial of shipments (Agenda Item 50- T4.3):** The Denial of Shipments Working Group has been actively addressing challenges in transport logistics by developing comprehensive recommendations to mitigate shipping delays and disruptions. During the General Conference (GC#69), the group presented their recommendations to different permanent missions, receiving a mixed response. While some missions offered support, others expressed divergent opinions, particularly concerning a list of variations that might cause differences in state regulations leading to shipment delays. The presentations focused on highlighting the root causes of shipment denials and calling for collaborative action from national regulators and industry stakeholders. The primary objective remains activating national-level channels to resolve regulatory variations, to pursue collaborative approaches to reduce these denials of shipments.

## Reports from international organizations/observers

- **IAG Updates: The major topics are reported in the following items.**
- **IMO:** updates on CCC11 (freight Container) and MSC 110 (Nuclear Energy for Ships)
- **UNECE:**
- IAEA is coordinating with UNECE for inclusion of SSR-6 (Rev.2) changes in UN Orange Book
- IAEA will participate in TDG/UNECE meeting from 24 Nov – 3 Dec 2025
- **ICAO: Update on amendment to Part 6;7.2.3 of the Technical Instructions for Air Transport**
- **ISO: ISO 7195 (Packagings for transport of uranium hexafluoride (UF<sub>6</sub>):**
  - Amendment concerning welded cylinders 1S/2S and new valves, the results of the vote for amending the standard were presented. The following points were agreed:
    - The comments from Japan focused on correction of editorial errors and will be addressed accordingly
    - Some comments from other countries were considered outside the scope of the current amendment and will be considered in future revisions
    - SC5/WG4 reached consensus to proceed to the next step: the Final Draft International Standard (FDIS) ballot
  - Revision to include 30B-X cylinders for UF<sub>6</sub> up to 10% or 20% enrichment:
    - Based on the outcomes of previous technical meetings and submitted comments, WG4 held detailed discussions on each proposed revision item using the draft stored in the ISO portal
    - It was agreed that a revised draft reflecting the results of the current technical discussions would be compiled by the end of October 2025
    - Discussions are expected to continue at the next technical meeting on 20th November 2025
- **NEA Division Radioactive Waste Management and Decommissioning (RWMD):**
  - The NEA Division of Radioactive Waste Management and Decommissioning (RWMD) supports the Radioactive Waste Management Committee (RWMC) in conducting international peer reviews and providing expert feedback to ensure the adoption of good practices in regulatory and technical methodologies
  - The Radioactive Waste Management Committee (RWMC) supports its members in the development of safe, economically efficient and scientifically informed approaches to managing all types of radioactive waste, including spent fuel classified as such. It serves as a neutral forum where policymakers, regulators and implementers collaborate to address shared challenges, exchange good practices and develop feasible solutions adapted to diverse national contexts.
  - Radioactive Waste Management Committee (RWMC) membership includes representatives from NEA member countries and the European Commission (EC). The committee also collaborates closely with the International Atomic Energy Agency (IAEA), which participates as an observer.
  - The Radioactive Waste Management Committee (RWMC) C applies a holistic and sustainable approach to radioactive waste management, considering three key dimensions:
    - Environmental
    - Economic
    - Societal

These aspects are assessed within three overarching frameworks: legislative, organisational and regulatory. By integrating these perspectives, the Radioactive Waste Management Committee (RWMC) systematically identifies priorities and develops strategies for effective waste management at all stages.

**Note:** See slides of the presentation on [TRANSSC-51 web folder](#).

## Closing of the meeting

- During the first day of the committee, the TRANSSC acknowledged the retirement and recognised more than 25 years of dedicated service of Mr. Rick Boyle, USA (September 2025), Mr. Jarlath Duffy, Ireland (July 2025), Mr Pierre Malesys, WNTI (November 2025), their expertise, insight, and engaging presence have made a lasting impact, shaped the transport sector and left unforgettable memories
- Plan to an Extraordinary Joint Meeting of EPreSC and TRANSSC to exchange feedback on the implementation of existing IAEA Safety Standards for emergency preparedness and response during the transport of radioactive material, and to present the EPreSC approach for integrating emergency preparedness and planning into the transport of small modular reactors (SMRs) and transportable nuclear power plant

<b>Follow Up Action Items</b>	<b>Owner</b>
[1] Denmark confirmed the availability to present country's experience on implementation of SSR-6 into national framework during the TRANSSC 52 meeting. Pakistan also volunteered for TRANSSC-52. (Agenda Item # 51-T5.3)	IAEA
[2] TTEG Chair(s) should keep TTEG(s) SharePoint site updated to reflect the latest workplan, work progress and list of members. (Agenda Item # 51-T5.8)	IAEA
[3] The Secretariat will share the proposal of topics- Emergency Planning and Response during transport of radioactive material, SMRs and NPPs, dates 11-13 May 12:00-17:00 for Extraordinary Joint Meeting of EPRESC-TRANSSC with EPRESC Secretariat for consideration in EPRESC-21 meeting (24-26 November 2025) (Agenda Item # 51-T7.2)	IAEA / Closed
[4] WNTI called for volunteers for the Ad hoc Working Groups and Correspondence Group (Section 4 above)	Closed
[5] Support and progress TTEG activities, including meetings and working groups	WNTI
[6] Prepare for and contribute to the Technical Meeting on Safe Transport and Innovative Technologies (August 2026).	WNTI
[7] To share the Report of 51st TRANSSC meeting after TRANSSC 52	WNTI
[8] To share the Report of 50th TRANSSC meeting after TRANSSC 51	Closed
<b>Next Meeting Details</b>	
<ul style="list-style-type: none"> <li>• <b>Extraordinary Joint Meeting of EPRESC-TRANSSC:</b> Tuesday 12 May 2026 by virtual 1200-1700hrs Vienna time</li> <li>• <b>TRANSSC-52:</b> 15-19 June 2026</li> <li>• <b>Technical Meeting on Topical Issues</b> on Safe Transport of Radioactive Material and Innovative Technologies (EVT2505443): 17 – 21 Aug 2026</li> <li>• <b>TRANSSC-53:</b> 16-20 November 2026</li> </ul>	