IAEA
International Atomic Energy Agency
Atoms for Peace and Development

55th Meeting of the Commission on Safety Standards

Agenda Item 3.1

Emergency Preparedness and Response Standards Committee (EPReSC)
End of Term Report
1 January 2021 – 31 December 2023

M. Grzechnik, EPReSC Chair
F. Stephani, EPReSC Scientific Secretary

The end of term (2021-23) report was approved by EPReSC through silent procedure and by the EPReSC Chair on 18 December 2023

Context

- EPReSC was established in July 2015
- The previous term 2021-23 was the 3rd term of EPReSC
  - 60 Member States designated 96 representatives
  - 10 International Organizations nominated observers
- EPReSC works on the basis of the Terms of Reference common to all the IAEA Standards Committees

Activities during the 2021-23 term

- Working method
  - Due to COVID-19, EPReSC-12 and EPReSC-13 were conducted virtually with shorter durations to make the timelines compatible with the different time zones from which participants attended remotely
  - EPReSC-14, EPReSC-15 and EPReSC-16 were conducted “in person” at the IAEA Headquarters in Vienna, with possibility for virtual participation
  - EPReSC-17 provided arrangements for virtual participation for observers only, in order to bring back, and limit, active participation to the meeting room

Activities during the 2021-23 term

- Working method
  - EPReSC members contributed intersessionally on specific topics or issues as agreed by EPReSC through the establishment of temporary Working Groups (WGs)
  - At EPReSC-14, to make suggestions on the following topics:
    - Management of radioactive waste in an emergency
    - Management of non-radiological consequences
    - Feasibility for, and usefulness of, developing a specific safety guide on EPR for facilities in Emergency Preparedness Category (EPC) III
  - Those 3 WGs held a number of virtual meetings and presented their findings and suggestions at EPReSC-15. This work fed into the discussion for the medium-term plan development of EPR Safety Standards

Activities during the 2021-23 term

- Working method
  - At EPReSC-16, EPReSC approved the formation of 3 WGs to review all 26 requirements in GSR Part 7:
    - General Requirements
    - Functional Requirements
    - Requirements for Infrastructure
  - Those 3 WGs held a number of virtual meetings and presented their findings and suggestions at EPReSC-17. The intent of the review was to inform the revision of GSR Part 7

Activities during the 2021-23 term

- Meetings of EPReSC:
  - EPReSC-12, 15-17 June 2021
  - EPReSC-13, 7-9 December 2021
  - EPReSC-14, 7-9 June 2022
  - EPReSC-15, 8-10 November 2022
  - EPReSC-16, 13-16 June 2023
  - EPReSC-17, 5-7 December 2023

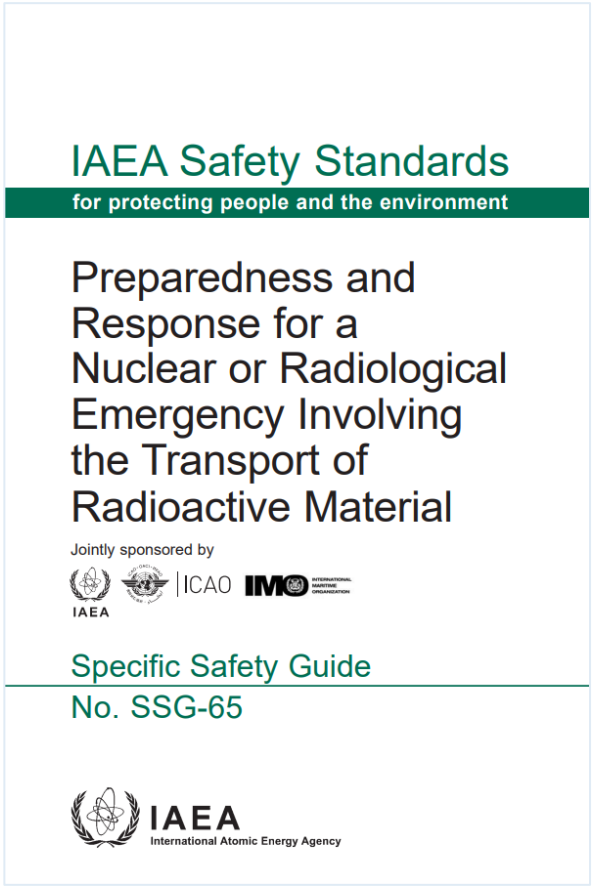
- Joint meetings with:
  - WASSC, 29 Sept. 2021
  - NSGC, 4 Nov. 2021
  - RASSC, 8 June 2022
  - NUSSC, 9 November 2022
  - RASSC, 14 June 2023
  - NUSSC & NSGC, 15 June 2023
  - WASSC, 4 Sept. 2023

Activities during the 2021-23 term

- Approvals and clearances
  - EPReSC approved a total of 24 draft Safety Standards (Steps 7 and 11)
  - EPReSC approved a total of 18 DPPs for draft Safety Standards
  - EPReSC cleared a total of 4 DPPs for draft Nuclear Security Guidance

Activities during the 2021-23 term

- EPR Safety Standard published (January 2022)



Activities during the 2021-23 term

- EPR Safety Standards under development

Ref.	Type	Tittle	Step (as per SPESS B) as of 31 Dec. 2023
DS504	GSG	Arrangements for Preparedness for a Nuclear or Radiological Emergency (Revision of GS-G-2.1)	9
DS527	GSG	Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency (Revision of GSG-2)	5
DS534	GSG	Protection Strategy for a Nuclear or Radiological Emergency	5

Activities during the 2021-23 term

- Medium-term plan
  - EPReSC medium-term plan time interval goes from mid-2023 to the end of 2028
  - At EPReSC-15, EPReSC approved the following medium-term plan for EPR Safety Standards: **Planning for, and revision of, GSR Part 7**

Way forward for new term (1/2)

EPReSC agreed that relevant priorities for its 4th term (2024-2026) should be based on the following considerations:

- Implement the medium-term plan for EPR Safety Standards as approved at EPReSC-15 and refined at EPReSC-16, through a review of GSR Part 7 to inform its revision (nature, scope, magnitude)
- Continue to collect and structure inputs for the establishment of a long-term plan for EPR Safety Standards (i.e., activities that will start in 2028)
- Raise awareness of GSR Part 7 Requirements, as well as publications, training materials, events and tools available to support their implementation

Way forward for new term (2/2)

- Raise awareness on EPREV missions to help Member States adhere to GSR Part 7 Requirements, including the flexibility in the scope of EPREV missions (e.g., limited to a specific EPC)
- Continue to organize joint meetings with other SSCs and NSGC. As applicable, it could be beneficial to organize a joint meeting with TRANSCC, including to deal with EPR aspects of transportable nuclear power plants and floating nuclear power plants
- Discussion on challenges in the application of EPR safety standards in an armed conflict situation should continue in order to capture lessons learned and way forward

Inputs to the Long-term Plan for Safety Standards

Long-term plan

- Request for inputs to the long-term plan for Safety Standards was on the agenda of EPReSC-15, EPReSC-16 and EPReSC-17

- Two aspects were discussed:
  - The Safety Standards structure
  - Key topics of interest

Conclusion from EPReSC-16 on the Structure of Safety Standards

- EPReSC is satisfied with, and willing to maintain:
  - the existing 3 levels of Safety Standards (Fundamentals, Requirements, Guides)
  - the existing 2 levels of Requirements (GSR and SSR)
  - the existing top-down approach

Conclusion from EPReSC-17 on topics of interest for the long-term plan

- Inputs to the Long-term plan for EPR Safety Standards approved by EPReSC:
  - Climate change and its effects
  - Transition from emergency exposure situations to existing exposure situations
  - Artificial intelligence (AI), including machine learning
  - More guidance on transition from an emergency exposure situation to (i) an existing exposure situation off-site and (ii) a planned exposure situation on-site
  - Management and development of skilled human resources
  - Effects of armed conflicts

Additional observations from EPReSC to the CSS

- From EPReSC-17, **to be shared with the CSS**:
  - The use of “shall” for requirements is often wrongly understood (as “must”) by native speakers – the CSS to consider changing the use of ‘must’ (fundamentals), ‘shall’ (requirements) and ‘should’ (recommendation). This may also help for translation of Safety Standards to other languages
  - The use of bold “overarching” requirements and non-bold sub requirement paragraphs is confusing for users and does not help to convey the message that all paragraphs in a GSR are equally important
  - To make more explicit in the beginning of each Safety Standard document that the content is not binding for Member States (but binding for IAEA teams providing services to Member States)

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Thank you!