Nuclear Safety Standards Committee

48th Meeting, 26-28 November 2019
Agenda item 2.5

Draft Safety Guide DS516:
Criticality Safety in the Handling of Fissile Material
(Revision of SSG-27)

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Background

• DS516 is a revision of SSG-27- Criticality Safety in the Handling of Fissile Material

• Revision by amendment

• The guide needs to be revised to account for:
  – Recently published SSR-4 and GSRs Part 4, 5, 6 and SSR-5 and SSR-6
  – Feedback from the use of the document by MSs
  – Operating experience feedback (OEF) from FINAS
  – Experience gained from SEDO missions
Overview of the Document

• The Scope and Objectives of the Guide remain unchanged;

• The Structure of the Safety Guide remains essentially unchanged
  – The section on Management System is now a separate chapter;
  – Subsection on “Waste and Decommissioning” was split in two.

• The main revisions were:
  – Proper terminology – ‘credible abnormal conditions’, ‘nuclide composition’;
  – Harmonization with SSR-4 requirements on criticality safety (Requirements 38 and 66);
  – Specific guidance related to “Verification and validation of calculational models”;
  – References updated;
Status of the Document

- The DPP approved by SSCs in 2018 and by CSS in April 2019;
- First drafts developed in Consultancy Meetings (December 2018 - March 2019);
- Draft approved by the Coordination Committee (August 2019);
- Draft submitted to SSCs for review (August 2019);
- Approved by WASSC and TRANSSC (October 2019).
SSC Member Comments: Summary

• 109 comments received from 12 Member States+ ENISS;

• Most comments accepted as proposed or with modification;

• The comments were mainly for clarification, consistent use of terminology, additional links to safety requirements and to improve guidance in some areas;

• Comments rejected (8) were to avoid inconsistency with other parts of the document, to ensure technical precision of the text and consistency with SSR-4 requirements.

• All resolutions were discussed with Members

There are no unresolved comments
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Action Requested

Approval of the draft DS516 for submission to Member States for comments
Thank you!