

SPESS F

Document Preparation Profile (DPP)

Version 1.4 dated 03 June 2025

1. IDENTIFICATION

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

Safety Requirements

Working ID: DS558

Proposed Title: Preparedness and Response for a Nuclear or Radiological Emergency, GSR Part 7 (Rev. 1)

Proposed Action: Revision of a publication

Preparedness and Response for a Nuclear or Radiological Emergency, GSR Part 7, 2015

Review Committee(s) or Group: EPRReSC, NUSSC, RASSC, TRANSSC, WASSC, NSGC

Technical Officer(s): Monica Dobbertin (NS-IEC)

2. BACKGROUND

IAEA Safety Standards Series No. GSR Part 7, Preparedness and Response for a Nuclear or Radiological Emergency, was published in 2015 with the objective to establish, on the basis of IAEA Safety Standards Series No. SF-1, requirements for emergency preparedness and response (EPR) to nuclear or radiological emergencies. It sets out the objectives, criteria and requirements for the protection of human health and the environment in the event of such an emergency.

GSR Part 7 superseded the IAEA Safety Standards Series No. GS-R-2 that had been published in 2002, to integrate lessons learned from the Fukushima accident. Since the publication of GSR Part 7 in 2015, feedback has been gathered and lessons have been learned from disruptive situations that might affect the safety of nuclear facilities (e.g. the Covid-19 pandemic) and new or innovative nuclear technologies have been deployed or are likely to be deployed in the coming years. Lastly, since the publication of GSR Part 7, the Emergency Preparedness and Response Standards Committee (EPRReSC) has been established to provide the Secretariat with views and advice specific to the development or revision of Safety Standards in the area of EPR.

3. JUSTIFICATION FOR THE PRODUCTION OF THE PUBLICATION

Several interactions were conducted by the IAEA Secretariat with members of the EPRReSC in the recent years, on the revision of GSR Part 7. The first mention of a potential revision of GSR Part 7 was made at the 15th meeting of EPRReSC (EPRReSC-15) in November 2022 when EPRReSC discussed its medium-term plan for the time period mid-2023 – end of 2027. Later, working groups were established within the EPRReSC (EPRReSC 17 meeting), and consultancy meetings were conducted to support the idea of a revision of GSR Part 7 with a feedback analysis to inform on the nature, scope and magnitude of this revision. Summary of the findings made by EPRReSC in this

regard were documented as part of relevant EPRESC meetings and can be found on the IAEA website dedicated to the work of the safety standards committees.

The work of the EPRESC members is recognized and valued and will be considered during the draft process.

Moreover, the conclusions of the 57th meeting (session 4) of the Commission on Safety Standards held on 21 May 2025 are considered in the revision of GSR Part 7. In terms of added value expected, this revision will enhance the overall clarity of the content and “user-friendliness” by implementing the following proposals made by the CSS:

- significantly decrease the number of repetitions and cross-references in the document and duplication of information with other IAEA safety standards, and
- keep the existing structure for ensuring clarity and consistency of revised requirements.

The revised safety requirements, based on a graded approach as described in GSR Part 7, apply for preparedness and response for any nuclear or radiological emergency that could occur in relation to a facility, an activity or a source, irrespective of the cause. With due consideration of new emerging technologies, revised requirements are to be written in a technology neutral manner and, thus, to be applicable to any actual facility or activity and to evolutionary and innovative reactor designs.

4. OBJECTIVE

The objective of the revised publication is to establish a set of consolidated requirements for an adequate level of preparedness and response for a nuclear or radiological emergency. The application of these requirements is also intended to mitigate the consequences of a nuclear or radiological emergency if such an emergency arises despite all efforts made to prevent it, irrespective of its cause.

The fulfilment of these requirements will contribute to the harmonization worldwide of arrangements for preparedness and response for a nuclear or radiological emergency, with due consideration of insights and new challenges of relevance for current and future developments.

The revised requirements are intended to be applied by the government at the national level by means of adopting legislation and establishing regulations, and by making other arrangements, including assigning responsibilities (e.g. to the operating organization or the operating personnel of a facility or an activity, local or national officials, response organizations or the regulatory body) and verifying their effective fulfilment.

The revised requirements are also intended for use by response organizations, operating organizations and the regulatory body in respect of preparedness and response for a nuclear or radiological emergency, as well as by authorities with responsibilities for emergency preparedness and response at the local and regional level and, as appropriate, by relevant international organizations at the international level.

5. SCOPE

The scope of the publication will remain the same as in GSR Part 7, including all facilities and activities as described in IAEA safety standards. In addition, the review will ensure that revised requirements are in line with the latest developments in the system of radiation protection, cover the nuclear and radiation safety developments, and reflects the future developments and updates.

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

The revised publication will interface at least with the following IAEA safety standards, nuclear security series, and related international conventions (this is not, and cannot be, regarded as an exhaustive list):

- EUROPEAN ATOMIC ENERGY COMMUNITY, FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, INTERNATIONAL ATOMIC ENERGY AGENCY, INTERNATIONAL LABOUR ORGANIZATION, INTERNATIONAL MARITIME ORGANIZATION, OECD NUCLEAR ENERGY AGENCY, PAN AMERICAN HEALTH ORGANIZATION, UNITED NATIONS ENVIRONMENT PROGRAMME, WORLD HEALTH ORGANIZATION, Fundamental Safety Principles, IAEA Safety Standards Series No. SF-1, IAEA, Vienna (2006).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Governmental, Legal and Regulatory Framework for Safety, IAEA Safety Standards Series No. GSR Part 1 (Rev. 1), IAEA, Vienna (2016).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Leadership and Management for Safety, IAEA Safety Standards Series No. GSR Part 2, IAEA, Vienna (2016).
- EUROPEAN COMMISSION, FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, INTERNATIONAL ATOMIC ENERGY AGENCY, INTERNATIONAL LABOUR ORGANIZATION, OECD NUCLEAR ENERGY AGENCY, PAN AMERICAN HEALTH ORGANIZATION, UNITED NATIONS ENVIRONMENT PROGRAMME, WORLD HEALTH ORGANIZATION, Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards, IAEA Safety Standards Series No. GSR Part 3, IAEA, Vienna (2014).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Safety Assessment for Facilities and Activities, IAEA Safety Standards Series No. GSR Part 4 (Rev. 1), IAEA, Vienna (2016).
- DS548, Predisposal Management of Radioactive Waste, revision of GSR Part 5
- INTERNATIONAL ATOMIC ENERGY AGENCY, Decommissioning of Facilities, IAEA Safety Standards Series No. GSR Part 6, IAEA, Vienna (2014).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Arrangements for the Termination of a Nuclear or Radiological Emergency, IAEA Safety Standards Series No. GSG-11, IAEA, Vienna (2018)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Arrangements for Public Communication in Preparedness and Response for a Nuclear or Radiological Emergency, IAEA Safety Standards Series No. GSG-14, IAEA, Vienna (2020)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Regulations for the Safe Transport of Radioactive Material (2018 Edition), IAEA Safety Standards Series No. SSR-6 (Rev. 1), IAEA, Vienna (2018) (currently under revision)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Preparedness and Response for a Nuclear or Radiological Emergency Involving the Transport of Radioactive Material, IAEA Safety Standards Series No. SSG-65, IAEA, Vienna (2022).
- DS504, Arrangements for Preparedness for a Nuclear or Radiological Emergency, revision of GS-G-2.1.
- DS527, Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency, revision of GSG-2.

- DS534, Protection Strategy for a Nuclear or Radiological Emergency (new publication in preparation).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Objective and Essential Elements of a State's Nuclear Security Regime, IAEA Nuclear Security Series No. 20, IAEA, Vienna (2013).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Revision 5), IAEA Nuclear Security Series No. 13, IAEA, Vienna (2011) (currently under revision).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Nuclear Security Recommendations on Radioactive Material and Associated Facilities, IAEA Nuclear Security Series No. 14, IAEA, Vienna (2011) (currently under revision).
- EUROPEAN POLICE OFFICE, INTERNATIONAL ATOMIC ENERGY AGENCY, INTERNATIONAL CIVIL AVIATION ORGANIZATION, INTERNATIONAL CRIMINAL POLICE ORGANIZATION–INTERPOL, UNITED NATIONS INTERREGIONAL CRIME AND JUSTICE RESEARCH INSTITUTE, UNITED NATIONS OFFICE ON DRUGS AND CRIME, WORLD CUSTOMS ORGANIZATION, Nuclear Security Recommendations on Nuclear and Other Radioactive Material out of Regulatory Control, IAEA Nuclear Security Series No. 15, IAEA, Vienna (2011) (currently under revision).
- Convention on Early Notification of a Nuclear Accident, INFCIRC/335, IAEA, Vienna (1986).
- Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, INFCIRC/336, IAEA, Vienna (1986).

As applicable, sections in NSNI, NSRW and NSNS will be consulted on particular aspects during the drafting of this publication.

7. OVERVIEW

The current structure of GSR Part 7 will be kept.

The following organizations are current co-sponsors of GSR Part 7 and will be invited to contribute to drafting the document and to renew their co-sponsorship for the proposed publication: FAO, ICAO, ILO, IMO, INTERPOL, OECD/NEA, PAHO, CTBTO, OCHA, WHO, WMO.

The following organizations might additionally be contacted to become co-sponsors of the proposed publication: UNDRR, UNEP, UNOOSA.

Potential co-sponsors will be contacted shortly after the approval of the DPP (as per Step 4 in the SPESS B process). Organizations that will confirm their interest in co-sponsoring the proposed publication will be invited to send experts in the consultancy meetings and technical meeting that will be held as part of the drafting process.

8. PRODUCTION SCHEDULE:

Provisional schedule for preparation of the publication:

STEP 1: Preparing a DPP	DONE
STEP 2: Internal review of the DPP (Approval by the Coordination Committee)	Q1 2025
STEP 3: Review of the DPP by the review Committee(s) (Approval by review Committee(s))	Q2 2025
STEP 4: Review of the DPP by the CSS (approval by CSS) or information of the CSS on the DPP	Q4 2025
STEP 5: Preparing the draft publication	Q1 2026
STEP 6: First internal review of the draft publication (Approval by the Coordination Committee)	Q2 2027
STEP 7: First review of the draft publication by the review Committee(s) (Approval for submission to Member States for comments)	Q4 2027
STEP 8: Soliciting comments by Member States	Q1 2028
STEP 9: Addressing comments by Member States	Q3 2028
STEP 10: Second internal review of the draft publication (Approval by the Coordination Committee)	Q4 2028
STEP 11: Second review of the draft publication by the review Committee(s) (Approval of the draft)	Q2 2029
STEP 12: (For Safety Standards) Editing of the draft publication in MTCD and endorsement of the draft publication by the CSS (For nuclear security guidance) DDG's decision on whether additional consultation is needed, establishment by the Publications Committee and editing	Q4 2029
STEP 13: Approval by the Board of Governors (for SF and SR only)	Q1 2030
STEP 14: Target publication date	Q2 2030

9. RESOURCES

Estimated resources involved by the Secretariat (person-weeks) and the Member States (number and type of meetings):

- For the IAEA Secretariat:
 - For NS-IEC: 25 person-weeks for drafting.
 - Additionally, colleagues in NSNI, NSRW and NSNS might be consulted as applicable, and Safety Standards Specialists in NSOC will be involved.
- For Member States:
 - 4 one-week consultancy meetings with participation of up to 4 experts, i.e. 16 person-weeks.
 - 1 Technical Meeting with participation by experts from 50 Member States.