

**SPESS F**  
**Document Preparation Profile (DPP)**  
**Version 31 December 2019**

## **1. IDENTIFICATION**

**Document Category or set of publications to be revised in a concomitant manner:**

**General Safety Guide**

**Working ID:** DS513

**Proposed Title:** Leadership, Management and Culture for Safety

**Proposed Action:** Revision and expansion of IAEA Safety Standards Series No. GS-G-3.1, Application of the Management System for Facilities and Activities - to produce a new General Safety Guide to support IAEA Safety Standards Series No. GSR Part 2, Leadership and Management for Safety.

**Review Committee(s):** NUSSC, RASSC, TRANSSC, WASSC, NSGC, EPReSC

**Technical Officer(s):** Peter TARREN (NSNI/OSS)

## **2. BACKGROUND**

Principle 3 of IAEA Safety Standards Series No. SF-1, Fundamental Safety Principles states:

**‘Effective leadership and management for safety must be established and sustained in organizations concerned with, and facilities and activities that give rise to, radiation risks.’**

GSR Part 2 (Leadership and Management for Safety, published in 2016) establishes requirements for leadership and management for safety, and replaces GS-R-3 (The Management System for Facilities and Activities, published in 2006). GSR Part 2 addresses the same topics as GS-R-3, i.e. management for safety and culture for safety, but also covers new topics, i.e. leadership for safety, and assessment and continuous improvement of leadership and culture for safety. In addition, GSR Part 2 strengthens the requirements for the supply chain, the involvement of interested parties and the interface between safety and security.

GS-G-3.1 (Application of the Management System for Facilities and Activities, published in 2006) provided recommendations on meeting the requirements of GS-R-3 for all facilities and activities. Consequently, it focused primarily on the management system and safety culture, and did not address the new topics introduced in GSR Part 2.

## **3. JUSTIFICATION FOR THE PRODUCTION OF THE DOCUMENT**

The proposed General Safety Guide is needed for the following reasons:

- To provide recommendations that fully address Principle 3 of SF-1, especially in relation to leadership for safety.

- To update GS-G-3.1 to take account of the new or strengthened requirements introduced by GSR Part 2.
- A gap analysis of the coverage of leadership, management, safety culture, and measurement, assessment and improvement in existing safety standards indicated that there is currently a lack of recommendations and guidance for non-nuclear facilities, especially in relation to leadership for safety. The new General Safety Guide will address this.
- To provide guidance on applying a graded approach to the application of the requirements of GSR Part 2 at facilities of widely varying size and with activities of widely varying risk profiles.
- To take account of revisions to other safety standards since the publication of GS-G-3.1 in 2006.
- To emphasize, as necessary, the concept of quality in the context of management systems
- To incorporate feedback from Member States, including lessons from the Fukushima Daiichi accident and other events.
- To incorporate experience gained from IAEA peer review missions. e.g. OSART, ISCA, IRRS, INSARR, ISCA, EPREV missions.
- To take account of new and emerging practices and technologies.
- To establish a new General Safety Guide that will serve as a basis for the future development of Specific Safety Guides (or individual sections of such guides) on leadership, management and culture for safety for specific facilities and/or activities.

#### **4. OBJECTIVE**

The objective of the proposed General Safety Guide is to provide recommendations for all facilities and activities on how to comply with each of the requirements established in GSR Part 2.

The recommendations are aimed at operating organizations, regulatory bodies, emergency response organizations and authorities, and other parties with responsibilities relevant to leadership and management for safety who directly influence safety in facilities and activities. The guidance can also be used by those who have responsibilities to ensure that the delivery of services, the suppliers and manufacturers e.g. vendors and designers, also know the guidance to meet the requirements in GSR Part 2.

#### **5. SCOPE**

This General Safety Guide will have the same scope as GSR Part 2, i.e. it will address all facilities and activities, for the full lifetime of these facilities and duration of these activities, and for all operational states and accident conditions, and in a nuclear or radiological emergency.

The General Safety Guide will also provide guidance applicable for the functions and activities of the regulatory body; response organizations; organizations during transition, and for other government organizations as appropriate. This guide provides a generic, high level core principles for leadership, management and culture for safety. Detailed applications are addressed in other guides.

This General Safety Guide will not address leadership and management for nuclear security, although the interfaces between safety and nuclear security will be addressed (in an Appendix).

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

The proposed new Safety Guide will interface with many other IAEA Safety Standards, the more significant of which are as follows:

- Fundamental Safety Principles, IAEA Safety Standards Series No. SF-1, IAEA, Vienna (2006).
- Governmental, Legal and Regulatory Framework for Safety, IAEA Safety Standards Series No. GSR Part 1 (Rev. 1), IAEA, Vienna (2016).
- Leadership and Management for Safety, IAEA Safety Standards Series No. GSR Part 2, IAEA, Vienna (2016).
- Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards, IAEA Safety Standards Series No. GSR Part 3, IAEA, Vienna (2014).
- Preparedness and Response for a Nuclear or Radiological Emergency, IAEA Safety Standards Series No. GSR Part 7, IAEA, Vienna (2015).

As indicated in the justification, the new General Safety Guide will act as a basis for Specific Safety Guides to be developed in the future on leadership, management for safety and culture for safety for different facilities and activities. This will include:

- DS477: The Management System for the Predisposal Management and Disposal of Radioactive Waste (revision and combination of GS-G-3.3 and GS-G-3.4).
- A potential future revision of TS-G-1.4 on the Management System for the Safe Transport of Radioactive Material.
- A potential future revision of GS-G-3.5 on the Management System for Nuclear Installations.
- Other potential future Specific Safety Guides (or parts thereof) to be identified – for example in the medical and industrial sectors.

As this is a General Safety Guide, all sections in NS will be consulted, as necessary, during the drafting process.

A complete list of IAEA safety guides that have reference to Management Systems, Leadership and Safety Culture can be found at:

<https://www-ns.iaea.org/committees/files/draftcomments/1848/CopyofSafetyGuidessupportingGSRPart218-06-21.xlsx>

## **7. OVERVIEW**

This General Safety Guide will have the following structure:

Section 1: Background, Objective, Scope and Structure.

Section 2: Guidance on Requirement 1

- 2.1 Achieving the fundamental safety objective.
- 2.2 Management, leadership and culture for safety overview.
- 2.3 Safety-Security Interface.
- 2.4 Application of the graded approach to organizations of different types and complexity.
- 2.5 Responsibility for safety and guidance on achieving the fundamental safety objective.
- 2.6 The application of defence in depth and strength in depth in the area of management, leadership and culture for safety.
- 2.7 Relationship between Safety Culture and Human Technology and Organization (HTO) concepts.

Section 3: Guidance on Requirements 2 and 12

- 3.1 Leadership and culture for safety.
- 3.2 Leadership for safety and demonstration of leadership for safety by managers.
- 3.3 Culture for safety and fostering a culture for safety including safety culture promotion.

Section 4: Guidance on Requirements 3 to 11

- 4.1 Management for safety.
- 4.2 Responsibility for integration of safety into the management system, including effectiveness of the management system for human performance and reliability.
- 4.3 Integration and documentation of the management system and guidance on application of the graded approach to the management system
- 4.4 Management of resources for achieving organizational resilience.
- 4.5 Management of processes, activities and supply chain.

Section 5: Guidance on Requirements 13 and 14

- 5.1 Safety performance measurement and the identification of improvement actions.
- 5.2 Measurement, assessment and improvement of the management system, of leadership for safety and of safety culture.

APPENDICES – to be determined during the development of DS513, but will include:

- Application of the graded approach in small and medium sized organizations
- Systemic approach to safety, including the implementation of an integrated management system, and application of this system at different stages of the lifetime of facilities and duration of activities
- Safety and nuclear security interfaces
- Learning culture: assessment and improvement processes.
- The attributes of a strong culture for safety.
- Developing safety culture in other organizations, including the regulatory body and other relevant parties who directly influence safety in facilities and activities.

ANNEXES – brief case studies chosen to illustrate the application of the graded approach in practice in small, medium or high risk facilities and activities.

## 8. PRODUCTION SCHEDULE:

STEP 1: Preparing a DPP	DONE
STEP 2: Approval of DPP by the Coordination Committee	Q2 2019
STEP 3: Approval of DPP by the relevant review Committees	Q2 2019
STEP 4: Approval of DPP by the CSS	Q4 2019
STEP 5: Preparing the draft	Q3 2020
STEP 6: Approval of draft by the Coordination Committee	Q4 2020
STEP 7: Approval by the relevant review Committees for submission to Member States for comments	Q4 2020
STEP 8: Soliciting comments by Member States	Q1 2021
STEP 9: Addressing comments by Member States	Q1 2021
STEP 10: Approval of the revised draft by the Coordination Committee Review in NS-SSCS	Q3 2021
STEP 11: Approval by the relevant review Committees	Q4 2021
STEP 12: Endorsement by the CSS	Q1 2022
STEP 13: Establishment by the Publications Committee	Q1 2022
STEP 14: Target publication date	Q4 2022

## 9. RESOURCES

Staff: 25 staff weeks

Consultants: 20 weeks

An additional Technical Meeting will be considered at Step 5