# SPESS F Document Preparation Profile (DPP) Version 2 Dated 06/10/2017

#### 1. IDENTIFICATION

**Document Category: Generic Safety Guides** 

Working ID: DS513

Proposed Title: Leadership, Management and Culture for Safety

Proposed Action: Revision and merger of two Safety Guides, Application of the

Management System for Facilities and Activities IAEA Safety Standards Series No. GS-G-3.1 (2006) and the Management System for Nuclear Installations IAEA Safety Standards Series No. GS-G-3.5 (2009), into one new Safety Guide with additional content, to support Leadership and Management for Safety, IAEA Safety Standards

Series No. GSR Part 2 (2016).

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

**Technical Officer(s):** Helen RYCRAFT (NSNI/OSS)

#### 2. BACKGROUND

The existing Safety Guides, GS-G-3.5 and GS-G-3.1, published in 2009 and 2006 respectively, were developed to support the Safety Requirements publication The Management System for Facilities and Activities, IAEA Safety Standards Series No. GS-R-3, published in 2006. They provide generic guidance to aid in establishing, implementing, assessing and continually improving a management system that complies with the requirements established in GS-R-3.

GS-R-3 has now been revised and superseded by Leadership and Management for Safety, IAEA Safety Standards Series No. GSR Part 2, published in June 2016. This new publication covers new topics, e.g. leadership for safety, and continuous improvement and assessment of leadership and culture for safety. Other areas have been strengthened, e.g. supply chain, interested parties and the interface with security.

As requested by the CSS Chair in 2011, reviews of Safety Guides GS-G-3.1 and GS-G-3.5 were begun in parallel with the revision of GS-R-3. However substantial changes to the GSR-Part 2 revisions during 2014 and 2015 caused the suspension of the revision to the Guides so that effort could be focused on the publication of GSR Part 2.

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

Work can now be restarted on this review and revision and it is proposed that in line with the Road Map for the Long Term Structure of the IAEA Safety Standards, the two Safety Guides can be combined into one new Safety Guide to support GSR Part 2.

GSR Part 2 has additional requirements to those in GS-R-3, e.g. Requirement 2, Leadership for Safety and Requirement 14, Measurement, assessment, and improvement of leadership for safety and of culture for safety, which need to be addressed.

In addition, a number of projects were started in 2016 which are developing aspects of the requirements in GSR Part 2 and recommendations incorporating their outcomes will need to be included in the proposed new Safety Guide along with information from recently published guides and reports.

#### For example:

- Safety culture framework harmonization project work is being carried out with WANO and INPO to harmonize the safety culture frameworks in order to assist Member States in their safety culture improvement programmes and the application of assessment tools. [4 global workshops and 2 CS meetings]
- Leadership for safety project as part of the Leadership project in NP section, safety leadership is being defined and good practices identified. [4 CS meetings]

The proposed Safety Guide will be developed from existing tested practices applied by IAEA, and from Member States' experience. Two recent Agency publications refer to this area; Performing safety culture self-assessments, IAEA Safety Reports Series 83 ' (2016) and Independent safety culture assessment, IAEA Services Series 32 (2016), and there are publications in progress relating to self-assessment of leadership for safety for nuclear installations, facilities and activities.

#### GS-G 3.1 and GS-G-3.5 require updating with respect to:

- The Vienna Declaration;
- The Long Term Structure of the IAEA Safety Standards;
- Feedback from the users of IAEA Safety Standards;
- Revisions implemented in the other safety standards and, in particular, Safety of Nuclear Power Plants: Commissioning and Design, IAEA Safety Standards Series No. SSR-2/2 Rev. 1 (2016);
- Experience gained with various peer review missions e.g. OSART, ISCA, IRRS, INSARR, ISCA missions;
- Recent changes in operational practices, and embarking countries' experiences;
- Practices such as those in medical facilities and decommissioning activities;
- Developing practices in management, leadership and culture for safety in regulatory organizations.
- New design technologies and new builds;
- Lessons from the Fukushima Daiichi accident and other events in the nuclear industry.

#### 4. OBJECTIVE

The objective of the proposed Safety Guide is to provide recommendations to nuclear installations, facilities and activities (licensees and/or registrants), regulatory bodies and other relevant governmental organizations, to support the implementation of the requirements of GSR Part 2.

#### 5. SCOPE

This guide will cover:

- Graded approach to the application of the management system,
- Integrated management system,
- Leadership for safety,
- Influence of human, organizational and technology factors (HTO) on human and organizational performance; systemic approach to safety; and culture for safety.

- Safety and security interfaces,
- Approaches to measurement, assessment, and improvement of safety
- Application of defence-in-depth and strength-in-depth in the area of management, leadership and culture for safety.
- The interactions between organizations (e.g. interested parties) that can influence the management and leadership for safety of a facility or activity.[moved from Objective]

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

The proposed Safety Guide will supersede Safety Guides GS-G-3.1 and GS-G-3.5 and will provide recommendations and guidance in relation to all facilities and activities, including nuclear installations, on how to comply with the requirements established in GSR-Part 2.

As such, the new Safety Guide will interface with other IAEA Safety Standards containing requirements, recommendations and guidance on:

- Compliance with Fundamental Safety Principle No. 3;
- Management of safety, including the graded approach and integrated management systems;
- Leadership for Safety;
- Culture for Safety;
- Measurement, assessment and improvement of safety performance;
- New standards and guides under revision (e.g. DS 492 and the NS-G 2 series under the safety standard SSR 2/2 rev 1);

#### 7. OVERVIEW

It is proposed that the publication be split into 5 sections and structured to reflect the contents of GSR Part 2. Leadership and culture for safety will be contained in one section, as leadership for safety is a fundamental attribute of culture for safety.

Annexes will be included in the proposed Safety Guide upon the advice received from Member States in accordance with their needs.

This guide should be treated as a new publication as the structure and content. Although it will include the updated content of GS-G-3.1 and GS-G-3.5, this will not be a straightforward revision of these two guides. With this in mind the following is an outline of the document.

#### **Outline of the Proposed Structure of the document:**

Section 1: Background, Objective, Scope and Structure.

Section 2: Overview of Management and Leadership for safety in facilities and activities that give rise to radiation risks, and the regulatory organizations.

#### 2.1 Introduction

- 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 Requirement 1: Achieving the fundamental safety objective.
  - 2.5.1 Senior Leadership accountability.
  - 2.5.2 Individual responsibility.
  - 2.5.3 The application of defence in depth and strength in depth in the area of management, leadership and culture for safety.

Section 3: The leadership and fostering of culture for safety in facilities and activities that give rise to radiation risks

- 3.1 Leadership for safety Introduction.
- 3.2 Leadership for safety and guidance on Requirement 2: Demonstration of leadership for safety by managers.
  - 3.2.2 Senior management leadership for safety.
  - 3.2.2 Management leadership for safety at all levels.
  - 3.2.3 Leadership for safety by function-eg personnel or technical specialists.
- 3.3 Culture for safety Introduction.

Guidance on Requirement 12: Fostering a culture for safety including safety culture promotion.

- 3.3.1 An attribute framework for safety culture.
- 3.3.2 Sustaining a safety culture.

Section 4: The management of facilities and activities that give rise to radiation risks

- 4.1 Introduction.
- 4.2 Management for safety and responsibility for integration of safety into the management .system, including effectiveness of the management system for human performance.
  - 4.2.1 Guidance on Requirement 3: Responsibility of senior management for the management system.
  - 4.2.2. Guidance on Requirement 4: Goals, strategies, plans and objectives.
  - 4.2.2 Guidance on Requirement 5: Interaction with interested parties.
- 4.3 The management system
  - 4.3.1 Guidance on Requirement 6: Integration of the management system.
  - 4.3.2 Guidance on Requirement 7: Application of the graded approach to the management system.
  - 4.3.3 Guidance on Requirement 8: Documentation of the management system.
  - 4.4The management of resources Guidance on Requirement 9: Provision of resources
  - 4.5 Management of processes and activities
    - 4.5.1 Guidance on Requirement 10: Management of processes and activities.
    - 4.5.2 Guidance on Requirement 11: Management of the supply chain.

Section 5: Maintaining and improving safety

- 5.1 Introduction on safety performance measurement and the identification of improvement actions.
- 5.2 Measurement, assessment and improvement.
  - 5.2.1 Guidance on Requirement 13: Measurement, assessment and improvement of the management system.
  - 5.2.2 Guidance on Requirement 14: Measurement, assessment and improvement of leadership for safety and of safety culture.

### 8. PRODUCTION SCHEDULE: GSG for GSR-Part 2: Provisional schedule for preparation of the

document, outlining realistic expected dates for each step

document, outmining realistic expected dates for each step	A*
STEP 1: Preparing a DPP	DONE
STEP 2: Approval of DPP by the Coordination	Q3 2017
Committee	Q3 2017
STEP 3: Approval of DPP by the relevant review	Q2 2018
Committees	Q2 2016
STEP 4: Approval of DPP by the CSS	Q4 2018
STEP 5: Preparing the draft	`
	Q3 2019
A TM is organized for identifying member state practices	
in relation to GSR-Part 2 10-12 July 2017	
A CS is organized to identify the contents of the GSG –	
Part 2 24-27 July 2017	
A TM will be organized for the preparation of the draft	
Q2 2018	04.2010
STEP 6: Approval of draft by the Coordination Committee	Q4 2019
0.0000000000000000000000000000000000000	01.2020
STEP 7: Approval by the relevant review Committees for	Q1 2020
submission to Member States for comments	00.000
STEP 8: Soliciting comments by Member States	Q2 2020
STEP 9: Addressing comments by Member States	Q4 2020
STEP 10: Approval of the revised draft by the	Q1 2020
Coordination Committee	
Review in NS-SSCS	
STEP 11: Approval by the relevant review Committees	Q2 2021
STEP 12: Endorsement by the CSS	Q4 2021
STEP 13: Establishment by the Publications Committee	Q1 2022
and/or Board of Governors (for SF and SR only))	
STEP 14: Target publication date	Q4 2022

#### 9. RESOURCES

Staff: 25 staff weeks

Consultants: 20 consultant weeks