

SPESS F
Document Preparation Profile (DPP)
Version 4 dated 25 June 2021

1. IDENTIFICATION

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

Safety Guide and Implementing Guide

Working ID: DS533/NST067

Proposed Title: Management of the interfaces between safety and nuclear security

Proposed Action: new publication

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

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2. BACKGROUND

The IAEA Safety Fundamentals, SF-1, stipulates that safety measures and security measures have in common the aim of protecting human life and health and the environment from harmful effects of ionizing radiation, and that “Safety measures and security measures must be designed and implemented in an integrated manner so that security measures do not compromise safety and safety measures do not compromise security”. Relevant requirements are established in several IAEA Safety Requirements publications: for example, Requirement 12 of IAEA Safety Standards Series No. GSR Part 1 (Rev.1) states that “within the governmental and legal framework, adequate infrastructural arrangements be established for interfaces of safety with arrangements for nuclear security and with the state system of accounting for, and control of, nuclear material”. Further, IAEA Safety Standards Series No. GSR Part-2, requires that potential impacts of security measures on safety and potential impacts of safety measures on security be identified and resolved without compromising safety or security. Requirements for the identification and management of interfaces between safety and nuclear security are also established in IAEA Safety Standards Series No. GSR Part 3, GSR Part 5, GSR Part 7, SSR-2/1 (Rev. 1), SSR-2/2 (Rev. 1), SSR-3, SSR-4 and SSR-5.

Similarly, the IAEA Nuclear Security Fundamentals, NSS-20, stipulates that nuclear security and nuclear safety have in common the aim of protecting persons, property, society and the environment from harmful effects of ionizing radiation, and that “Security measures and safety measures have to be designed and implemented in an integrated manner to develop synergy between these two areas and also in a way that security measures do not compromise safety and safety measures do not compromise security”. IAEA Nuclear Security Series Nos 13, 14 and 15 provide recommendations on the interfaces of nuclear security with safety, for the operator, competent authorities and the State.

Feedback from different IAEA conferences, technical meetings (in particular the IAEA Technical Meeting on the Safety and Security Interface – Approaches and National Experiences, held in Vienna in 2018), IAEA peer review missions, training courses and workshops have highlighted the importance of interface management in order to take advantage of the synergies and to avoid adverse effects of potential conflicts~~that in many regulatory bodies and other competent authorities, operators, shippers~~

~~and carriers there are different approaches to managing the interfaces between safety and security of nuclear and other radioactive material and in facilities and activities~~, and therefore there is a need for further guidance on how to meeting the safety requirements established in the IAEA Safety Standards Series and the recommendations established in the IAEA Nuclear Security Series in a harmonized, holistic and complementary manner.

3. JUSTIFICATION FOR THE PRODUCTION OF THE DOCUMENT

Recommendations on certain technical aspects of the safety interfaces with security (i.e. how security should be considered in implementation of safety measures) are provided in various Safety Guides. Equally, certain technical aspects of the security interfaces with safety (i.e. how safety should be considered in implementation of security measures) are covered in various Implementing Guides and Technical Guidance publications. There are also several informational publications addressing technical aspects of the interfaces between safety and security (see Section 6 of this DPP). However, there is currently no publication within the IAEA Safety Standards Series or IAEA Nuclear Security Series that provides guidance on how to manage the interfaces between safety and security from an overarching perspective. When the interfaces between nuclear safety and security are managed effectively and proactively this can have a very positive effect on both functions, enabling synergies and efficiencies

The Commission on Safety Standards (CSS) has, for its seventh term, a recommendation “to develop publications on how to address the safety security interfaces”, which includes the development of joint publications. The Nuclear Security Guidance Committee (NSGC), at its 16th meeting, expressed its wish to explore the possibility of requested the development of “a jointly-published Safety Standard – Nuclear Security Series document on the subject of safety-security interfaces, in accordance with respective procedures, ...[of] high-level, strategic and have a tight focus.”

The need for such guidance has also been identified by the Advisory Group for Nuclear Security (AdSec) and the International Nuclear Safety Group (INSAG).

4. OBJECTIVE

The objective of the publication is to distinguish measures associated with safety and security and provide overarching guidance on managing the interfaces between safety and security so as to ensure that safety measures and security measures are designed and implemented in a coordinated manner, using graded approach in an integrated manner. This will facilitate more effective and efficient implementation of the relevant safety requirements of the IAEA Safety Standards Series and recommendations of the IAEA Nuclear Security Series.

The target audience of this publication are regulatory bodies and other competent authorities, as well as operators of facilities and activities (including shippers and carriers) involved in the management or regulation of the safety and nuclear security of all facilities and activities, including and emergency planning and response ~~agencies~~.

5. SCOPE

The publication will provide guidance for regulatory bodies and other competent authorities, as well as for operators of facilities and activities on management of the interfaces between safety and nuclear security at all stages of the lifetime and operational conditions of all facilities and the duration of activities, including transport, and for nuclear and other radioactive material out of regulatory control.

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

The proposed publication will interface with the following:

- 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, Objective and Essential Elements of a State's Nuclear Security Regime, IAEA Nuclear Security Series No. 20, IAEA, Vienna (2013).
- 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).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Safety Assessment for Facilities and Activities, General Safety Requirements, 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, Predisposal Management of Radioactive Waste, IAEA Safety Standards Series No. GSR Part 5, IAEA, Vienna (2009).
- FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, INTERNATIONAL ATOMIC ENERGY AGENCY, INTERNATIONAL CIVIL AVIATION ORGANIZATION, INTERNATIONAL LABOUR ORGANIZATION, INTERNATIONAL MARITIME ORGANIZATION, INTERPOL, OECD NUCLEAR ENERGY AGENCY, PAN AMERICAN HEALTH ORGANIZATION, PREPARATORY COMMISSION FOR THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION, UNITED NATIONS ENVIRONMENT PROGRAMME, UNITED NATIONS OFFICE FOR THE COORDINATION OF HUMANITARIAN AFFAIRS, WORLD HEALTH ORGANIZATION, WORLD METEOROLOGICAL ORGANIZATION, Preparedness and Response for a Nuclear or Radiological Emergency, IAEA Safety Standards Series No. GSR Part 7, IAEA, Vienna (2015).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Site Evaluation for Nuclear Installations, Specific Safety Requirements, 2019
- INTERNATIONAL ATOMIC ENERGY AGENCY, Safety of Nuclear Power Plants: Design, IAEA Safety Standards Series No. SSR-2/1 (Rev. 1), IAEA, Vienna (2016).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Safety of Nuclear Power Plants: Commissioning and Operation, IAEA Safety Standards Series No. SSR-2/2 (Rev. 1), IAEA, Vienna (2016).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Safety of Research Reactors, IAEA Safety Standards Series No. SSR-3, IAEA, Vienna (2016).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Safety of Nuclear Fuel Cycle Facilities, IAEA Safety Standards Series No. SSR-4, IAEA, Vienna (2017).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Disposal of Radioactive Waste, IAEA Safety Standards Series No. SSR-5, IAEA, Vienna (2011).
- The Convention on the Physical Protection of Nuclear Material, INFCIRC/274/Rev.1, IAEA, Vienna (1980).
- Amendment to the Convention on the Physical Protection of Nuclear Material, INFCIRC/274/Rev.1/Mod.1, IAEA, Vienna (2016).

- [INTERNATIONAL ATOMIC ENERGY AGENCY, Objective and Essential Elements of a State's Nuclear Security Regime, Nuclear Security Fundamentals, 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).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Nuclear Security Recommendations on Radioactive Material and Associated Facilities, IAEA Nuclear Security Series No. 14, IAEA, Vienna (2011).
- 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).
- [INTERNATIONAL ATOMIC ENERGY AGENCY, Establishing the Nuclear Security Infrastructure for a Nuclear Power Programme, IAEA Nuclear security Series No. 19, IAEA Vienna.](#)
- [INTERNATIONAL ATOMIC ENERGY AGENCY, Physical Protection of Nuclear Material and Nuclear Facilities \(Implementation of INFCIRC/225/Rev.5\), IAEA Nuclear Security Series No. 27-G, Vienna \(2018\)](#)
- [INTERNATIONAL ATOMIC ENERGY AGENCY, Security During the Lifetime of a Nuclear Facility, IAEA Nuclear Security Series No. 35-G, Vienna \(2019\)](#)
- [INTERNATIONAL ATOMIC ENERGY AGENCY, Computer Security Techniques for Nuclear Facilities, Technical Guidance, 2021](#)
- [INTERNATIONAL ATOMIC ENERGY AGENCY, Computer Security for Nuclear Security, Nuclear Security Series, 2021](#)
- INTERNATIONAL NUCLEAR SAFETY GROUP, The Interface Between Safety and Security at Nuclear Power Plants, INSAG-24, IAEA, Vienna (2010).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Code of Conduct on the Safety and Security of Radioactive Sources, IAEA, Vienna (2005).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Management of the Interface between Nuclear Safety and Security for Research Reactors, IAEA-TECDOC-1801, IAEA, Vienna (2016).
- INTERNATIONAL ATOMIC ENERGY AGENCY, The Nuclear Safety and Nuclear Security Interface: Approaches and National Experiences, Technical Reports Series No. 1000, IAEA, Vienna (2021).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Managing the Interface between Safety and Security for Normal Commercial Shipments of Radioactive Material, Technical Reports Series No. 1001, IAEA, Vienna (in preparation)
- [INTERNATIONAL ATOMIC ENERGY AGENCY, Notification, Authorization and Enforcement of Safety and Security of Radiation Sources, Technical Reports Series No. 1002, IAEA, Vienna \(in preparation\).](#)
- [INTERNATIONAL ATOMIC ENERGY AGENCY, Regulatory Oversight of the Nuclear Safety and Nuclear Security Interfaces in Nuclear Power Plants, Technical Reports Series No. 1003, IAEA, Vienna \(in preparation\).](#)
- [WENRA Report on “Interfaces between Nuclear Safety and Nuclear Security” of 10 April 2019.](#)

7. OVERVIEW

A tentative table of contents of the publication is provided here below:

1. Introduction

- 1.1. Background
 - 1.2. Objective
 - 1.3. Scope
 - 1.4. Structure
 2. National legislative and regulatory framework for managing the interfaces between safety and nuclear security
 - 2.3. Considerations for management of the interfaces between safety and nuclear security (synergies and challenges)
 - 3.1. Importance of the proper management of the interfaces between safety and nuclear security
 - 2.1.3.2. Identification of interfaces between safety and nuclear security, including safety interfaces with security and security interfaces with safety
 - 2.2.3.3. Requirements and recommendations Guidance on the management of interfaces between safety and security
 - ~~2.3.1.1. National legislative and regulatory framework for managing the interfaces between safety and nuclear security~~
 - ~~2.4.1.1. Importance of the proper management of the interfaces between safety and nuclear security~~
 - 2.5.3.4. Application of risk informed approaches (graded approach, determination of design basis, changing risks/hazards and emerging threats)
 - 3.4. Roles and responsibilities in the management of the interfaces between safety and nuclear security
 - 3.1.4.1. Role and responsibilities of the regulatory body and other competent authorities:
 - 3.1.1.4.1.1. Role and responsibilities of the regulatory body
 - 3.1.2.4.1.2. Role and responsibilities of other competent authorities
 - 3.1.3.4.1.3. Coordination between the regulatory body and other competent authorities
 - 3.2.4.2. Role and responsibilities of the operators of facilities and activities
 - 4.3. Integrated management system, leadership for safety and nuclear security, safety culture and nuclear security culture
 - 4.4. Coordinated command and control interfaces and communications (interoperability)
 - 3.3.4.5. Configuration management
 - 4.5. Implementation of technical requirements and recommendations guidance
- Sub-structure to be further elaborated

8. PRODUCTION SCHEDULE: Provisional schedule for preparation of the document, outlining realistic expected dates for *(fill the column corresponding to your proposed document and delete the other columns)*:

	A*		
STEP 1: Preparing a DPP	DONE		
STEP 2: Approval of DPP by the Coordination Committee	2021 Q3		
STEP 3: Approval of DPP by the relevant review Committees	2021 Q4		
STEP 4: Approval of DPP by the CSS in consultation with NSGC	2021 Q4		
STEP 5: Preparing the draft	<u>2022 Q1 - 2023 Q2</u>		
STEP 6: Approval of draft by the Coordination Committee	2023 Q2		
STEP 7: Approval by the relevant review Committees for submission to Member States for comments	2023 Q2		
STEP 8: Soliciting comments by Member States	2023 Q4		
STEP 9: Addressing comments by Member States	2024 Q1		
STEP 10: Approval of the revised draft by the Coordination Committee Review in NS-SSCS	2024 Q1		
STEP 11: Approval by the relevant review Committees	2024 Q2		
STEP 12: Endorsement by the CSS in consultation with NSGC	2024 Q2		
STEP 13: Establishment by the Publications Committee and/or Board of Governors (for SF and SR only)	2024 Q4		
STEP 14: Target publication date	2025 Q1		

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- *Column A for Safety Fundamentals, Safety Requirements and Safety Guides.*
- *Column B for Nuclear Security Series publications noting that for Technical Guides a fast track may be proposed and justified for approval by the NSGC at step 3. If approved, the draft will not be subject to the steps 4 to 10 and, be provided at step 11 to the NSGC to take note of it before its publication*
- *Column C for TECDOCs, safety reports and other publications*

9. RESOURCES

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

Staff resources

NSNS – 1 TO ten weeks

NSNI – 1 TO ten weeks

NSRW – 1 TO ten weeks

IEC – 1 TO ten weeks

Meetings

5-6 CMs

1 TM

Home Based Assignments (as appropriate)