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: NST067 // DS533

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, EPReSC

Technical Officer(s): Kristof Horvath NSNS, A. Shokr NSNI, M. Recio NSRW, IEC

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 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 meeting the safety requirements established in the IAEA Safety Standards Series and the recommendations established in the IAEA Nuclear Security Series.

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.

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, 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 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 an integrated manner. This will facilitate 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 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 of all facilities and activities, 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).
- 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, 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).
- 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 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).

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. Considerations for management of the interfaces between safety and nuclear security
 - 2.1. Identification of interfaces between safety and nuclear security
 - 2.2. Requirements and recommendations on the interfaces between safety and security
 - 2.3. National legislative and regulatory framework for managing the interfaces between safety and nuclear security
 - 2.4. Importance of the proper management of the interfaces between safety and nuclear security
 - 2.5. Application of risk informed approaches (graded approach, determination of design basis, changing risks/hazards and emerging threats)
- 3. Roles and responsibilities in the management of the interfaces between safety and nuclear security
 - 3.1. Role and responsibilities of the regulatory body and other competent authorities:
 - 3.1.1. Role and responsibilities of the regulatory body
 - 3.1.2. Role and responsibilities of other competent authorities
 - 3.1.3. Coordination between the regulatory body and other competent authorities
 - 3.2. Role and responsibilities of the operators of facilities and activities
 - 3.3. Integrated management system, leadership for safety and nuclear security, safety culture and nuclear security culture
- 4. Implementation of technical requirements and recommendations

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	2021 Q3
Committee	
STEP 3: Approval of DPP by the relevant review	2021 Q4
Committees	
STEP 4: Approval of DPP by the CSS in consultation	2021 Q4
with NSGC	
STEP 5: Preparing the draft	2023 Q2
STEP 6: Approval of draft by the Coordination	2023 Q2
Committee	
STEP 7: Approval by the relevant review Committees for	2023 Q2
submission to Member States for comments	
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	2024 Q1
Coordination Committee	
Review in NS-SSCS	
STEP 11: Approval by the relevant review Committees	2024 Q2
STEP 12: Endorsement by the CSS in consultation with	2024 Q2
NSGC	
STEP 13: Establishment by the Publications Committee	2024 Q4
and/or Board of Governors (for SF and SR only))	
STEP 14: Target publication date	2025 Q1

- 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)