Document Preparation Profile (DPP)
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1. IDENTIFICATION

Document Category: **Nuclear Security Series Recommendations**

Working ID: **NST073**

Proposed Title: **Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Revision 6) (NSS No. 13, Revision 1)**

Proposed Action: **Revision of the publication:**

Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Revision 5) (NSS No. 13), published 2011

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

Technical Officer(s): **Nilgun GERCEKER, MAFA/NSNS**

2. BACKGROUND

The publication "Recommendations for the Physical Protection of Nuclear Material" was initially prepared by a panel of experts convened by the Director General and published in 1972. After revision, these Recommendations were published in 1975 in the INFCIRC series as INFCIRC/225. They were further revised in 1977, 1989, 1993 and 1998. In 2005, awareness started to grow of the need to revise the 1998 version of the document INFCIRC/225/Rev.4 (Corr.) to take into account recent developments. By the early 2000's, there was even more impetus to revise this guidance in response to the evolution of the terrorism threat and related concerns regarding "self-protection" concepts, as well as the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material. "The Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Revision 5)" was published in 2011 as part of the IAEA Nuclear Security Series (NSS No.13). As stated in its Foreword, the publication "is intended to serve the function of two documents", namely, Revision 5 of INFCIRC/225, and NSS No.13.

The Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Revision 5) (NSS No. 13) along with Nuclear Security Recommendations on Radioactive Material and Associated Facilities (NSS No. 14) and Nuclear Security Recommendations on Nuclear and Other Radioactive Material out of Regulatory Control (NSS No. 15), comprise the second tier of the IAEA Nuclear Security Series, known as the Nuclear Security Recommendations.

In 2019, a review process for the Nuclear Security Recommendations was initiated to determine whether revisions were necessary. During the review, three meetings, involving more than 100 participants from more than 60 Member States, were held and they focused on determining if NSS No. 13 needed to be revised in the near term, as well as on the policy and legal implications of a revision:

- An Open-Ended Meeting of Technical and Legal Experts to review of NSS No. 13 (INFCIRC/225 Revision 5) in July 2019;

- A Consultancy Meeting on the Technical Review of NSS No. 13 (INFCIRC/225 Revision 5) in January 2020; and
- A second Open-Ended Meeting of Technical and Legal Experts to review of NSS No. 13 (INFCIRC/225 Revision 5) in June-October 2020 (held virtually).

The review concluded that there was a need for a limited revision of the Recommendations publications (NSS Nos 13, 14 and 15), focusing on addressing inconsistencies and clarifications to terminology and some limited updates and clarifications, as detailed later in this DPP. During its 18th meeting dated 30 November-3 December 2020, the Nuclear Security Guidance Committee (NSGC) recommended that such a limited revision of these publications be undertaken.

3. JUSTIFICATION FOR THE PRODUCTION OF THE PUBLICATION

NSS No. 13 (INFCIRC/225/Revision 5) is widely used and of key importance to many Member States. This publication is highly valued because INFCIRC/225 is cited in a numerous international legally binding instruments and serves as a reference for developing national legislation. Additionally, reference to INFCIR/225, as revised, is included in many Member States' national laws and regulations as the baseline for establishing physical protection requirements, as well as serving as the 'effective physical protection' requirement for exports of certain nuclear material, equipment and technology for Nuclear Suppliers Group members.

It has been more than ten years since the Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Revision 5) was published. Since January 2011, 7 revisions and 29 new publications have been issued within the Nuclear Security Series, including the Nuclear Security Fundamentals, covering areas such as information and computer security, capacity building, nuclear security culture, threat assessment, insider threats, nuclear material accounting and control, transport and others. Twenty-two of them are either crosscutting publications or directly support the implementation of NSS No. 13 (INFCIRC/225/Revision 5). While NSS No. 13 (INFCIRC/225/Revision 5) remains largely applicable and relevant, there are some areas where a decade of application of this publication in Member States has demonstrated the need for limited updates to improve its usability.

A comprehensive review process regarding a potential revision of NSS No. 13 (INFCIRC/225/Revision 5) concluded that there is a need for limited revision of the publication. The revision will not change the current structure of NSS No.13 (except in limited ways as set out in the Annex) or change the dual titling of NSS No. 13 as INFCIRC/225 (i.e. the revision will be titled NSS No. 13 Revision 1 (INFCIRC/225 Revision 6)). However, it should be updated to include reference to the IAEA Nuclear Security Fundamentals (NSS No. 20) and relevant legally binding international instruments (e.g. the Convention on the Physical Protection of Nuclear Material (CPPNM) and its Amendment, and the International Convention for the Suppression of Acts of Terrorism (ICSANT)), and to reflect any revised terminology, as determined during the revision, and other findings from the review process.

4. OBJECTIVE

The current objective of NSS No. 13 (INFCIRC/225/Revision 5) will remain broadly unchanged as:
"This publication provides a set of recommended requirements to achieve the four Physical Protection Objectives and to apply the 12 Fundamental Principles that were endorsed by the IAEA Board of the Governors and General Conference in September 2001. The purpose of this publication is to provide guidance to States and their competent authority on how to develop or enhance, implement and maintain a physical protection regime for nuclear material and nuclear facilities, through the establishment or

improvement of their capabilities to implement legislative and regulatory programmes to address the protection of nuclear material and nuclear facilities in order to reduce the risk of malicious acts involving that material or those facilities."

Additional clarification could be added to the objective to enhance precision and ensure consistency.

5. SCOPE

The current scope of NSS No. 13 (INFCIRC/225/Revision 5) will remain broadly unchanged as set out in publication. Annex details the scope of anticipated changes.

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

The Nuclear Security Recommendations are the second tier in the NSS, governed by the Nuclear Security Fundamentals, and this current structure will remain unchanged.

NSS No. 13 (INFCIRC/225/Revision 5) is connected to numerous lower-level Nuclear Security Series publications, including existing publications and publications currently under development. NSS No. 13 provides the recommendations, while these publications offer more detailed guidance, thereby supporting the implementation of recommendations.

To ensure a coordinated approach, this revision is anticipated to be conducted simultaneously with the revision of the other Nuclear Security Recommendations (NSS Nos 14 and 15) and the Nuclear Security Fundamentals. This will guarantee that any revisions made to one of the publications will be subsequently noted and their implications considered across all related top-tier Nuclear Security Series publications. Additionally, this approach aims to improve consistency among the Recommendations publications and with the Fundamentals in order to provide an improved basis for the revision of existing lower-level guidance (e.g., Implementing Guides and Technical Guidance publications) and the development of new lower-level guidance.

Interfaces between Nuclear Security Series publications and the Safety Fundamentals and Safety Requirements will also be noted, where appropriate.

The Divisions of the Nuclear Safety and Security Department will be consulted during the revision process as necessary.

7. OVERVIEW

The table of contents of the publication will remain broadly unchanged, as follows:

1. INTRODUCTION
2. OBJECTIVES OF A STATE'S PHYSICAL PROTECTION REGIME
3. ELEMENTS OF A STATE'S PHYSICAL PROTECTION REGIME FOR NUCLEAR MATERIAL AND NUCLEAR FACILITIES
4. REQUIREMENTS FOR MEASURES AGAINST UNAUTHORIZED REMOVAL OF NUCLEAR MATERIAL IN USE AND STORAGE
5. REQUIREMENTS FOR MEASURES AGAINST SABOTAGE OF NUCLEAR FACILITIES AND NUCLEAR MATERIAL IN USE AND STORAGE

6. REQUIREMENTS FOR MEASURES AGAINST UNAUTHORIZED REMOVAL AND SABOTAGE OF NUCLEAR MATERIAL DURING TRANSPORT
7. DEFINITIONS

While NSS No. 13 (INFCIRC/225/Revision 5) was not co-sponsored by any international organization, recognizing the benefits of such collaboration the revised document should consider co-sponsorship from EUROPOL, ICAO, IMO, INTERPOL, UNICRI, UNODC, WCO and other relevant international governmental organizations, as appropriate.

8. PRODUCTION SCHEDULE:

Provisional schedule for preparation of the publication, outlining realistic expected dates for each step:

STEP 1: Preparing a DPP	DONE
STEP 2: Internal review of the DPP (Approval by the Coordination Committee)	Aug 2024
STEP 3: Review of the DPP by the review Committee(s) (Approval by review Committee(s))	Q4 2024
STEP 4: Review of the DPP by the CSS (approval by CSS) or information of the CSS on the DPP	
STEP 5: Preparing the draft publication	Jan 2025 – Feb 2027
STEP 6: First internal review of the draft publication (Approval by the Coordination Committee)	Mar 2027
STEP 7: First review of the draft publication by the review Committee(s) (Approval for submission to Member States for comments)	Jun 2027
STEP 8: Soliciting comments by Member States	Jul – Oct 2027
STEP 9: Addressing comments by Member States	Nov – Feb 2028
STEP 10: Second internal review of the draft publication (Approval by the Coordination Committee)	Mar 2028
STEP 11: Second review of the draft publication by the review Committee(s) (Approval of the draft)	Jun 2028
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	Jul – Dec 2028
STEP 13: Approval by the Board of Governors (for SF and SR only)	
STEP 14: Target publication date	Q2 2029

9. RESOURCES

Three Consultancy Meetings are likely to be needed during the revision process. Some of these may be convened virtually, as considered appropriate. Additionally, about two Technical Meetings covering all four publications might be necessary to better address Member States' feedback on proposed revisions.

To ensure a coordinated revision of the Nuclear Security Fundamentals and Recommendations, and to harmonize the four drafts, meetings with the Chairs of the meetings to be conducted, potentially including a limited number of additional technical experts, are likely to be needed. These meetings may also be held virtually.

The technical officers assigned to the revision of other top-tier publications (the Fundamentals and Recommendations) should communicate regularly on each other's progress.

ANNEX

Drawing on the results of the review process for NSS No. 13 (INFCIRC/225/Revision 5), the dual titling of the publication should be maintained, so that the title of the revision will be Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Revision 6) (NSS No. 13, Revision 1).

Furthermore, the following gaps should be addressed in a limited revision of Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Revision 5) (NSS No. 13):

- Revise unclear and inconsistent definitions;
- Ensure consistency of terminology among the Recommendations publications and with the Fundamentals, and, where applicable, within the publication;
- Ensure consistency of concepts among the Recommendations publications and with the Fundamentals, in cases where the inconsistencies are likely to lead to difficulties for States in implementing the guidance therein;
- Consider enhancing or adding a limited amount of text to account for experience gained during the last decade, as well as developments in the following areas, in cases where the guidance provided in the existing text is not adequate to support lower-level, more detailed guidance:
    - Information and computer security;
    - Insider threats;
    - Emerging threats;
    - New and emerging technologies that could be used to strengthen nuclear security systems; while keeping the publication overarching and technology-neutral;
    - Safety-security interfaces;
    - Sustainability and resilience of nuclear security regime including in unplanned situations for which continuity of operations is needed (e.g., pandemics and natural disasters);

In addition, the revision should consider updating the definition of “nuclear facility' and providing clarification in relation to the topics such as security plan, security during the lifetime of a nuclear facility and sabotage thresholds, which is drawn upon the outcomes of the review process.

Keeping in mind the importance of the stability of the Recommendations for States, the revision should be limited. It should generally avoid any changes that alter the structure of the publication or their level of detail. Changes should be generally limited to the addition of and editing of individual sentences and paragraphs, and, for any proposed changes, it should be carefully considered whether or not the existing language in the publication is broad enough that further information could simply be added in lower-level publications without the need to edit the NSS No.13.

Furthermore, the revision of the NSS No.13 should be in coordination and harmonization with revision of the other top tier publications. In this regard, the revision of the NSS No.13 and NSS No.14 should consider the outcomes of the consultancy meeting on revision of NSS No.14, held in February 2020, that recommended review of the scope of NSS No.13 and NSS No.14 to decide in which document the security of nuclear material against unauthorized removal for offsite or onsite exposure or dispersal would be best addressed.

As noted in the main text of the DPP, an extensive review process, involving discussions during the meetings of NSGC, a consultancy meeting, two open-ended meetings, was undertaken prior to the preparation of the DPP. The results and conclusions of the meetings have been recorded and summarized in the Chair's Reports of the meetings. They served as a basis for this DPP, will be made available to the experts that will participate in drafting, and will be used during the revision process.