1. IDENTIFICATION

Document Category: Nuclear Security Series

Working ID: NST064

Proposed Title: Radiological Crime Scene Management

Proposed Action: Revision of Nuclear Security Series No. 22-G

Review Committee(s) or Group: NSGC, EPReSC

Technical Officer(s): Peter Burton

2. BACKGROUND

IAEA Nuclear Security Series (NSS) No. 22-G, Implementing Guide on Radiological Crime Scene Management, published in 2014, presents guidance on the safe, secure, effective and efficient operations at a crime scene where a nuclear security event has or is suspected to have occurred and where nuclear and other radioactive material out of regulatory control are known or suspected to be present. The guidance covers detection, assessment, confirmation, identification and mitigation of hazards as well as exploitation of a radiological crime scene. In particular, NSS No. 22-G highlights that detection systems and measures should be based on a risk informed approach and addresses situations in which the material originates from both within and outside the State. This publication increased awareness surrounding procedures for notification of relevant agencies, coordination for dealing with the nuclear or other radioactive material out of regulatory control as well as conventional evidence and other difficulties associated with the respective nuclear security event, as well as developing plans for the same.

In 2019, the Secretariat completed a review of the practices contained in NSS No. 22-G. This review was augmented by input from external international experts involved in the management of radiological crime scenes. The review was carried out by means of a Consultancy Meeting in May 2019 and the collection of feedback from experts over a period of time by the Secretariat. Input from scientists on the roles and responsibilities section of the guidance was also accounted for, and a review was carried out by the Secretariat, noting possible changes that need to be considered. Several important topics requiring an update were identified. For example, a reassessment of the identified roles and core functions in crime scene management is needed to bring them in line with current practices in Member States. Also, within the current edition, some clarification is needed around command functions and command elements which, particularly in one diagram, need de-confliction. The review also indicated that simplifying some of the topics within the guidance contained in NSS No. 22-G could enable States to implement the recommended response procedures with more ease. Moreover, alternative approaches to radioactive crime scene management could be added to the draft, particularly for Member States who lack the funding, infrastructure and/or resources needed to be able to fully implement the existing guidance.
3. JUSTIFICATION FOR THE PRODUCTION OF THE DOCUMENT

In line with NSGC’s guidance to review NSS publications every 5 to 7 years to determine the need for revision, the Agency has reviewed NSS No. 22-G, and concluded that there are several reasons to initiate a revision of this publication.

The first edition of this publication was in 2014. Updating this publication is within IAEA guidelines and benefits Member States by providing up to date operation principles and procedures, as well as taking into account Developing States’ ability to implement some of the more complex aspects of Radiological Crime Scene Management by simplifying aspects such as roles and responsibilities.

4. OBJECTIVE

The objective of this publication is to provide law enforcement officials, national policy makers, decision makers, local authorities and technical support personnel with guidance on the framework and the main functional elements for radiological crime scene management so that they may be adopted or adapted to meet the needs of the various jurisdictions and competent authorities within each State.

As part of a comprehensive nuclear security regime, the proposed publication will provide guidance on the safe, secure, effective and efficient operations at a crime scene where nuclear or other radioactive material are known, or suspected to be present. It will also assist Member States in selecting means for designing, and implementing and sustaining systems and measures to respond to, and exploit safely, a confirmed, evaluate the preparedness of existing systems or suspected radiological crime scene, their individual elements.

5. SCOPE

The scope of the proposed revision of the Implementing Guide will include the systems and measures, equipment and scientific competence by which material out of regulatory control at a crime scene are located, categorized and identified, and a full exploitation of evidence conducted. This publication will cover the investigative activities, which are necessary to properly manage a radiological crime scene including locating, identifying and safely recovering, processing, cataloguing, transporting and storing all evidence related to the nuclear security event. This publication will cover all investigative activities within the crime scene, performed by both traditional law enforcement investigators and technical specialists. This publication will also cover aspects outside the crime scene that are in conjunction with crime scene investigations. This includes from the point of specialist response arrival up until the point that all evidence is presented for forensic analysis and up until the scene is handed back for recovery operations after a full investigation.

The scope of this proposed revision is more limited than the scope of the original NSS No. 22-G, due to the fact that other NSS publications addressing related issues such as response to nuclear security events have been published since the original NSS No. 22-G was issued.
The proposed revision of NSS No. 22-G will not cover detection of nuclear and other radioactive material within regulated facilities and activities. The proposed revision of NSS No. 22-G will not address initial response activities as a result of a nuclear security event, or any nuclear or radiological emergency triggered by the event. In such situations, the relevant response activities would fall within the scope of other guidance, such as Developing a National Framework for Response to Nuclear Security Events (NSS No. 37-G), or relevant IAEA Emergency Preparedness and Response Guides/Safety Standards Series, such as GSR Part 7 Preparedness and Response for a Nuclear or radiological Emergency and IAEA’s Emergency Preparedness and Response (EPR) series such as EPR-Method 2003, Method for Developing Arrangements for Response to a Nuclear or Radiological Emergency (EPR-Method 2003, under revision).

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

The proposed publication will supersede the Implementing Guide NSS No. 22-G in the IAEA Nuclear Security Series, and will provide guidance on the means by which States could implement the relevant measures set out in Nuclear Security Recommendations on Nuclear and Other Radioactive Materials out of Regulatory Control (NSS No. 15)” and is related to “Developing a National Framework for Response to Nuclear Security Events (NSS No. 37-G)”

The IAEA Department of Nuclear Safety and Security is presently developing Emergency Preparedness and Response Series publications, and the revision of NSS No. 22-G will take into account concepts included in those, where appropriate. Other guidance related to nuclear response exercises that is due to be published will also be referenced.

The revision of NSS No. 22-G will ensure that content created is commensurate with the following IAEA Nuclear Security Series publications

7) 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
7. OVERVIEW

The following table of suggested contents is tentative and may change during the consultation process.

CONTENTS

1. INTRODUCTION

2. OVERVIEW OF INVESTIGATIONS INTO A NUCLEAR SECURITY EVENT

3. FRAMEWORK FOR RADIOLOGICAL CRIME SCENE MANAGEMENT

4. CONDUCT OF OPERATIONS

5. PREPAREDNESS

6. INTERNATIONAL COOPERATION AND ASSISTANCE

The proposed publication will cover the following topics:

- Overview of investigations into a nuclear security event to bring in line with contemporary investigative practices and make clear the investigative priorities;
- Multi-agency command structure to ensure there is no crossover in responsibilities between operational scene management and crime scene investigation and to bring up to date with modern command doctrine, giving examples of a more flexible approach to command allowing for initiative to be used rather than a strict hierarchical approach;
- The conduct of operations at a crime scene to make clear allocation of responsibilities of different roles;
- Specialist roles and responsibilities at a crime scene to ensure responsibilities are clear and that the right competent and qualified persons conduct these vital safety roles;
- Inter-agency arrangements to ensure interoperability between competent responding agencies and to ensure science takes a prominent and integral larger part in assisting decision making at scene all command levels;
- Cooperation and coordination among relevant competent authorities including information sharing and technical support;
- Crime scene operations to de-conflict between scene command operational responsibilities and investigation responsibilities;
- Foster a closer partnership between Nuclear Forensics discipline and Radiological Crime Scene management;
- Preparedness to ensure that Member States have the guidance to be able to prepare for an event involving a radiological crime scene.

### 8. PRODUCTION SCHEDULE:

<table>
<thead>
<tr>
<th>STEP</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Preparing a DPP</td>
<td>Done</td>
</tr>
<tr>
<td>2</td>
<td>Approval of DPP by the Coordination Committee</td>
<td>March 2020</td>
</tr>
<tr>
<td>3</td>
<td>Approval of DPP by the relevant review Committees</td>
<td>June 2020</td>
</tr>
<tr>
<td>4</td>
<td>Approval of DPP by the CSS</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Preparing the draft, indicate as to whether a TM is expected to be organized for the preparation of the draft</td>
<td>July 2020 – July 2021</td>
</tr>
<tr>
<td>6</td>
<td>Approval of draft by the Coordination Committee</td>
<td>September 2021</td>
</tr>
<tr>
<td>7</td>
<td>Approval by the relevant review Committees for submission to Member States for comments</td>
<td>November 2021</td>
</tr>
<tr>
<td>8</td>
<td>Soliciting comments by Member States</td>
<td>January – April 2022</td>
</tr>
<tr>
<td>9</td>
<td>Addressing comments by Member States</td>
<td>April – August 2022</td>
</tr>
<tr>
<td>10</td>
<td>Approval of the revised draft by the Coordination Committee, review in NSOC-SGDS (Technical Editorial review)</td>
<td>September 2022</td>
</tr>
<tr>
<td>11</td>
<td>Approval by the relevant review Committees</td>
<td>November 2022</td>
</tr>
<tr>
<td>12</td>
<td>- Submission to the CSS, Submission in parallel and approval by the Publications Committee, MTCRD Editing, endorsement of the edited version by the CSS</td>
<td>January 2023</td>
</tr>
<tr>
<td>13</td>
<td>Establishment by the Publications Committee and/or Board of Governors (for SF and SR only)</td>
<td>N/A</td>
</tr>
<tr>
<td>14</td>
<td>Target publication date</td>
<td>End 2023</td>
</tr>
</tbody>
</table>
9. RESOURCES

The development of this publication will involve preparation of a draft over the course of several consultancy meetings and home based assignments. The draft will then be reviewed by IAEA staff and other key stakeholders such as Interpol and UNICRI. Comments and input will then be solicited from a much wider group through the convening of a final consultancy meeting.