

# Arrangements for the Termination of a Nuclear or Radiological Emergency

## *Training Materials*



**IAEA**

International Atomic Energy Agency

# IAEA SAFETY STANDARDS AND RELATED PUBLICATIONS

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Under the terms of Article III of its Statute, the IAEA is authorized to establish or adopt standards of safety for protection of health and minimization of danger to life and property, and to provide for the application of these standards.

The publications by means of which the IAEA establishes standards are issued in the **IAEA Safety Standards Series**. This series covers nuclear safety, radiation safety, transport safety and waste safety. The publication categories in the series are **Safety Fundamentals**, **Safety Requirements** and **Safety Guides**.

Information on the IAEA's safety standards programme is available at the IAEA Internet site

[www.iaea.org/resources/safety-standards](http://www.iaea.org/resources/safety-standards)

The site provides the texts in English of published and draft safety standards. The texts of safety standards issued in Arabic, Chinese, French, Russian and Spanish, the IAEA Safety Glossary and a status report for safety standards under development are also available. For further information, please contact the IAEA at: Vienna International Centre, PO Box 100, 1400 Vienna, Austria.

All users of IAEA safety standards are invited to inform the IAEA of experience in their use (e.g. as a basis for national regulations, for safety reviews and for training courses) for the purpose of ensuring that they continue to meet users' needs. Information may be provided via the IAEA Internet site or by post, as above, or by email to [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org).

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ARRANGEMENTS FOR THE  
TERMINATION OF A NUCLEAR  
OR RADIOLOGICAL EMERGENCY

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The Agency's Statute was approved on 23 October 1956 by the Conference on the Statute of the IAEA held at United Nations Headquarters, New York; it entered into force on 29 July 1957. The Headquarters of the Agency are situated in Vienna. Its principal objective is "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world".

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ARRANGEMENTS FOR THE  
TERMINATION OF A NUCLEAR  
OR RADIOLOGICAL EMERGENCY  
TRAINING MATERIALS

INTERNATIONAL ATOMIC ENERGY AGENCY  
VIENNA, 2022



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## **FOREWORD**

Under Article 5.b(ii) of the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, one function of the IAEA is to assist, upon request, a State Party or Member State in developing appropriate training programmes for personnel to deal with nuclear and radiological emergencies. The presented training materials are intended to be used for these purposes.

In March 2018, IAEA Safety Standards Series No. GSG-11, Arrangements for the Termination of a Nuclear or Radiological Emergency, was published, jointly sponsored by ten international intergovernmental organizations. This Safety Guide provides guidance and recommendations on the emergency arrangements for the termination of a nuclear or radiological emergency and the subsequent transition from an emergency exposure situation to either an existing exposure situation or a planned exposure situation. It also includes detailed prerequisites that are expected to be met so that the authorities can formally declare an emergency ended and provides guidance on adapting and lifting protective actions.

IAEA Safety Standards Series No. GSG-11 is intended to assist Member States in the application of Requirement 18 of IAEA Safety Standards Series No. GSR Part 7, Preparedness and Response for a Nuclear or Radiological Emergency, and Requirement 46 of IAEA Safety Standards Series No. GSR Part 3, Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards.

To help Member States get familiar with the guidance and recommendations provided by IAEA Safety Standards Series No. GSG-11 and the manner in which they can be applied at the national level, the IAEA has designed this workshop and developed associated training materials.

The training materials are intended to be used, by the IAEA, as a standard package for delivering workshops at national, regional and international levels and, by Member States, as a basis for developing national training. The overall format of the workshop is based on dynamic learning and a participant centred training methodology to allow for the active participation of participants and the practical application of the knowledge gained.

The IAEA officer responsible for developing the training materials was S. Nestoroska Madjunarova of the Incident and Emergency Centre.

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# **CONTENTS**

## **of Training Materials on**

### **Arrangements for the Termination of a Nuclear or Radiological**

### **Emergency**

➤ **Agenda folder contains:**

- Generic Workshop Agenda, as an Excel file

➤ **Lectures folder contains:**

- Objectives and Expectations, as a PDF and PDF with notes files
- The Basic Concepts in Emergency Preparedness and Response, as a PDF and PDF with notes files
- Primary Objective of and Prerequisites for Termination of a Nuclear or Radiological Emergency, as a PDF and PDF with notes files
- Management Organization and Infrastructure for the Transition Phase, as a PDF and PDF with notes files
- Protection Strategy for the Transition Phase, as a PDF and PDF with notes files
- Adapting and Lifting Protective Actions, as a PDF and PDF with notes files
- Protection of Emergency Workers and Helpers in the Transition Phase, as a PDF and PDF with notes files
- Characterization of the Exposure Situation, as a PDF and PDF with notes files
- Radioactive waste Management following a Nuclear or Radiological Emergency, as a PDF and PDF with notes files
- Medical Follow-up and Provision of Mental Health and Psychosocial Support, as a PDF and PDF with notes files
- Consultation with Interested Parties, as a PDF and PDF with notes files

➤ **Working Sessions folder contains:**

- Working Groups Assignment Template, as a Word file
- Description of Postulated Emergency Scenarios, as a PDF file
- Guidance for Preparation of Working Group Presentations, as a PDF file
- Guidance for Lecturers, as a PDF file
- Working Session Questions, as a PDF file
- Introduction to the Working Session and Working Groups, as a PDF and PDF with notes files
- Working Session Part 1, as a PDF and PDF with notes files
- Working Session Part 2, as a PDF and PDF with notes files

- Working Session Part 3, as a PDF and PDF with notes files
- Working Session Part 4, as a PDF and PDF with notes files
- Guidance for preparation of Working Group presentations, as a PDF and PDF with notes files

➤ **Case studies folder contains:**

- Guide for Lecturers, as a PDF file
- Case study Part 1 on Goiania and PAKS, as a PDF and PDF with notes files
- Questions for Part 1, as a PDF file
- Case study Part 2 on the Fukushima Daiichi Accident, as a PDF and PDF with notes files
- Questions for Part 2 & 3, as a PDF file
- Case study Part 3 on incident in Mexico, as a PDF and PDF with notes files

➤ **Evaluation folder contains:**

- Mentor Evaluation Form, as a PDF file
- Workshop Feedback Form, as a PDF file
- Day 1, Training Module Feedback Form, as a PDF file
- Day 2, Training Module Feedback Form, as a PDF file
- Days 3 & 4, Training Module Feedback Form, as a PDF file

## OBJECTIVES

This workshop and associated training materials are designed to train participants on:

- What needs to be ensured so that a nuclear or radiological emergency can be declared formally ended and the transition to an existing exposure situation or a planned exposure situation can take place; and
- How to prepare for facilitating the timely resumption of social and economic activity after a nuclear or radiological emergency.

## TARGET AUDIENCE

- Decision makers (Emergency Managers)
- Emergency Planners (at the facility, local, regional and national levels)
- Emergency Preparedness and Response Coordinators
- Relevant Staff of Response Organizations (at all levels)
- Relevant Staff of the Regulatory Bodies
- Radiological Assessors and Qualified Experts

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