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International Atomic Energy Agency

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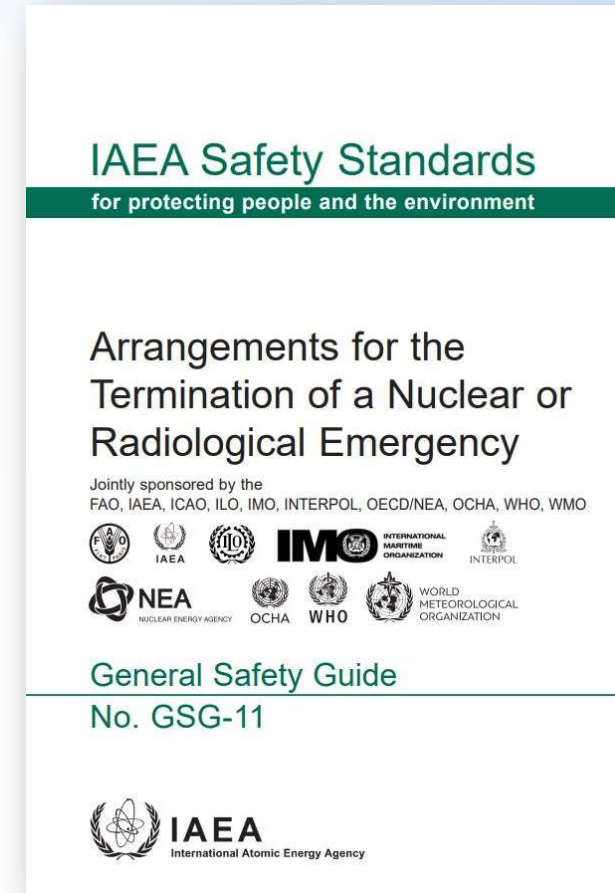
Arrangements for the Termination of a Nuclear or Radiological Emergency

Objectives and expectations

Lecture 01

Purpose of the Workshop

- Familiarize participants with the guidance and recommendations of the IAEA Safety Standards Series No. GSG-11 on *Arrangements for the Termination of a Nuclear or Radiological Emergency*.
- Train participants on:
 - How to prepare for facilitating the timely resumption of social and economic activity after an emergency;
 - What needs to be ensured so that the emergency can be declared formally ended and the transition to an existing exposure situation or a planned exposure situation can take place.



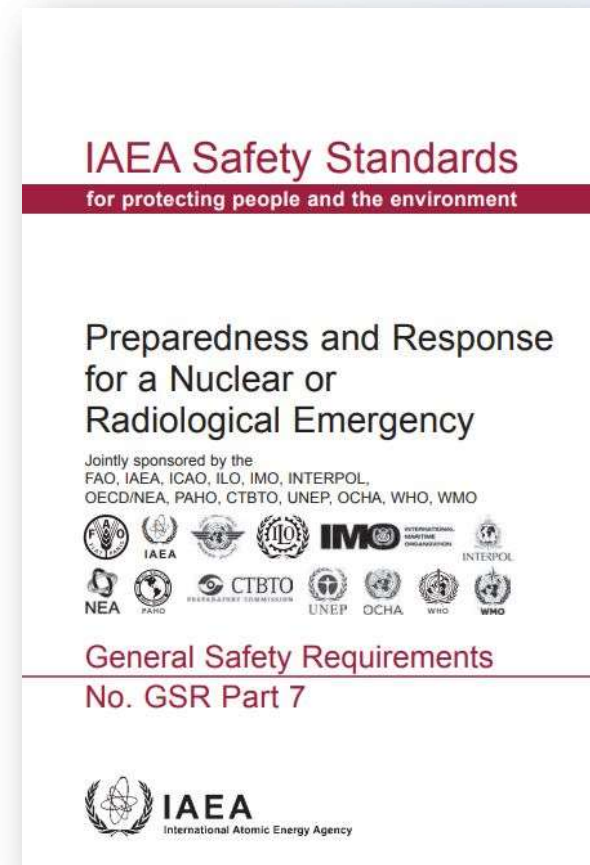
Background



General Safety Requirements No. GSR Part 7 (2015)

Requirement 18: Terminating a nuclear or radiological emergency

“The government shall ensure that arrangements are in place and are implemented for the termination of a nuclear or radiological emergency, with account taken of the need for the resumption of social and economic activity.”



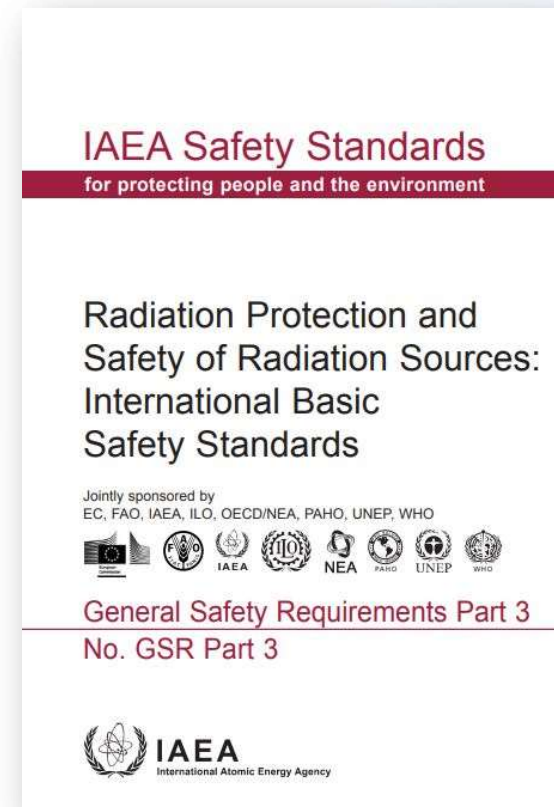
Background (cont'd.)



General Safety Requirements No. GSR Part 3 (2014)

Requirement 46: Transition from an emergency exposure situation to an existing exposure situation

“The government shall ensure that arrangements are in place and are implemented as appropriate for the transition from an emergency exposure situation to an existing exposure situation.”



Background (cont'd.)



- Justifications for developing GSG-11:
 - Absence of detailed guidance for Member States on how to meet the requirements of GSR Part 3 and GSR Part 7;
 - Lessons identified from past emergencies;
 - Requests by Member States.

IAEA Safety Standards

for protecting people and the environment

Arrangements for the Termination of a Nuclear or Radiological Emergency

Jointly sponsored by the
FAO, IAEA, ICAO, ILO, IMO, INTERPOL, OECD/NEA, OCHA, WHO, WMO



General Safety Guide

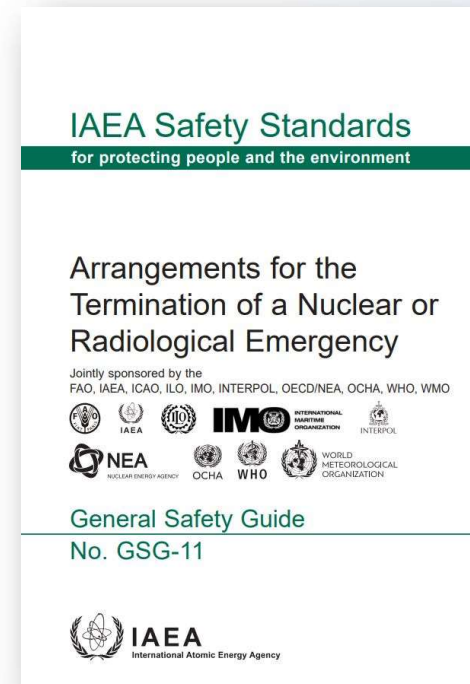
No. GSG-11



IAEA Safety Standards Series No. GSG-11

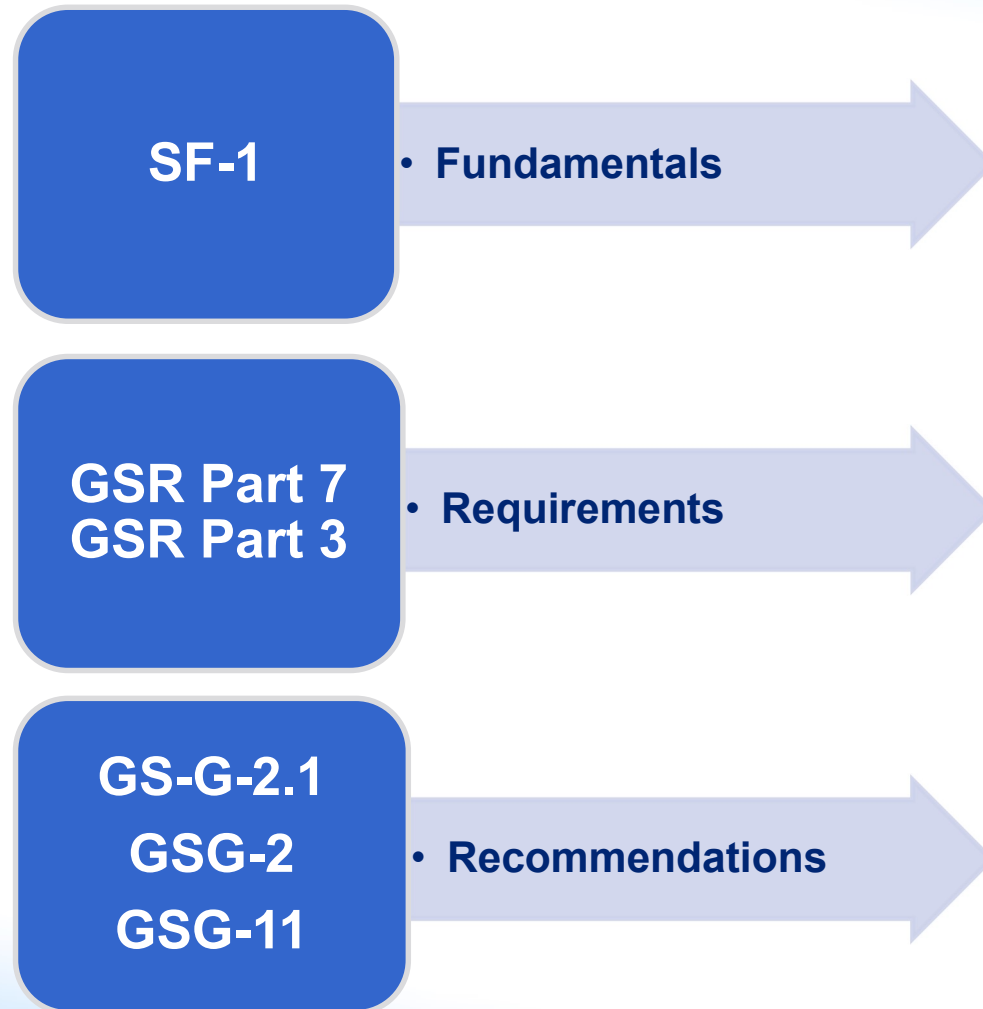


- Provides guidance and recommendations on:
 - Developing arrangements, as part of overall emergency preparedness efforts, for transition to either an existing exposure situation or a planned exposure situation, as appropriate, and for the termination of the emergency;
 - The primary objective and prerequisites for enabling the emergency to be terminated.
- Applies to any nuclear or radiological emergency irrespective of its cause;
- Published in **March 2018**;
- Joint sponsorship by: FAO, IAEA, ICAO, IMO, ILO, INTERPOL, OECD/NEA, UN OCHA, WHO, WMO.



IAEA Safety Standards Series No. GSG-11

Place within EPR Safety Standards Series



IAEA Safety Standards Series No. GSG-11

Structure



- 1. Introduction
 - Background
 - Objective
 - Scope
 - Structure
- 2. Phases of a nuclear or radiological emergency
 - General
 - Emergency response phase
 - Transition phase
- 3. Primary objective and prerequisites
 - General
 - Primary objective
 - General prerequisites
 - Specific prerequisites
 - Timeframes for the termination

IAEA Safety Standards Series No. GSG-11

Structure (cont'd)



- 4. Arrangements for the transition phase
 - General
 - Authority, responsibilities and management
 - Hazard assessment
 - Protection of the public
 - Protection strategy
 - Adapting and lifting the protective actions
 - Characterization of the exposure situation
 - Medical follow-up and counselling
 - Protection of emergency workers and helpers
 - Radioactive waste management
 - Consultation with the public and other interested parties
 - Compensation for victims of damage
 - Infrastructure

IAEA Safety Standards Series No. GSG-11

Structure (cont'd)



- Appendix: considerations for lifting protective actions and other response actions
- References
- Annex I: case studies
 - The Fukushima Daiichi accident in Japan
 - The radiological accident in Goiânia, Brazil
 - The severe nuclear incident at Paks NPP, Hungary
 - The radiological incident in Mexico
- Annex II: factors for consideration in the justification and optimization of the protection strategy

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- # AGENDA
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- ## Pilot Workshop on Arrangements for the Termination of a Nuclear or Radiological Emergency 18 – 21 December 2017, Vienna, Austria
- | Monday | | | |
|------------|----------|--|--|
| Start/Time | End/Time | Subject | Presenter/Facilitator |
| 10:00 AM | 10:30 AM | Opening Remarks | Ms R. de la Vega, Co-Chairperson, EC
All attendees and participants |
| 10:30 AM | 10:45 AM | Objectives and expectations of the Workshop | Ms R. de la Vega |
| 10:45 AM | 11:15 AM | BREAK | |
| 11:15 AM | 11:45 AM | Basic concepts in EPR | Ms J. Nantopoulos-Majnonovic, EC |
| 11:45 AM | 12:00 PM | Introduction to Working Groups and Working Sessions | Dr C. Rabinovich, EC |
| 12:00 PM | 12:30 PM | Working Session (Part 1) | All participants
Facilitator: J. Nantopoulos-Majnonovic |
| 12:30 PM | 1:00 PM | LUNCH BREAK | |
| 1:00 PM | 1:30 PM | Working Session (Part 2) (cont'd) | All participants
Facilitator: J. Nantopoulos-Majnonovic |
| 1:30 PM | 1:45 PM | Primary Objectives and Pre-conditions for the Termination of a Nuclear or Radiological Emergency | Dr D. Rueder, Switzerland |
| 1:45 PM | 2:15 PM | BREAK | |
| 2:15 PM | 2:45 PM | Case Studies (Part 1) | Mr C. Vrommeleers, Belgium |
| 2:45 PM | 3:15 PM | Protection Strategy for the Transition Phase | All participants
Facilitator: C. Rabinovich |
| 3:15 PM | 3:45 PM | Working Session (Part 3) | |
| Tuesday | | | |
| Start/Time | End/Time | Subject | Presenter/Facilitator |
| 9:00 AM | 9:45 AM | Working Session (Part 2) (cont'd) | All participants
Facilitator: C. Rabinovich |
| 9:45 AM | 10:00 AM | Adapting and Using Protection Actions | Ms J. Nantopoulos-Majnonovic |
| 10:00 AM | 10:30 AM | BREAK | |
| 10:30 AM | 11:00 AM | Protection of Emergency Workers and Helpless in the Transition Phase | Dr A. Mikhlin |
| 11:00 AM | 1:00 PM | LUNCH BREAK | |
| 1:00 PM | 1:30 PM | Characterisation of the Exposure Situation | Mr C. Vrommeleers |
| 1:30 PM | 2:00 PM | Median Follow-up and Provision of Advice, Health and Psychological Support | Dr E. Harvati, EC |
| 2:00 PM | 2:30 PM | BREAK | |
| 2:30 PM | 4:15 PM | Case Studies (Part 2) | Ms C. Rabinovich |
| 4:15 PM | 5:00 PM | Working Session (Part 3) | All participants
Facilitator: J. Nantopoulos-Majnonovic |
| Wednesday | | | |
| Start/Time | End/Time | Subject | Presenter/Facilitator |
| 9:00 AM | 9:45 AM | Working Session (Part 3) (cont'd) | All participants |
| 9:45 AM | 10:30 AM | Reductive Workable Measures Following a Nuclear or Radiological Emergency | Facilitator: J. Nantopoulos-Majnonovic
Ms C. Mikhlin |
| 10:30 AM | 10:45 AM | BREAK | |
| 10:45 AM | 11:45 AM | Conclusions with Interim Periods | Ms J. Nantopoulos-Majnonovic |
| 11:45 AM | 12:00 PM | Management Organisation in the Transition Stage | Dr D. Rueder |
| 12:00 PM | 1:00 PM | LUNCH BREAK | |
| 1:00 PM | 1:30 PM | Infrastructure for Preparedness for the Transition Phase | Mr C. Rabinovich |
| 1:30 PM | 2:15 PM | Working Session (Part 4) | All participants
Facilitator: J. Nantopoulos-Majnonovic |
| 2:15 PM | 3:45 PM | BREAK | |

Workshop Objectives



- Identify and apply the prerequisites for declaring an emergency ended for postulated emergency scenarios;
- Identify activities to be carried out during the transition phase;
- Recognize important elements of the protection strategy for the transition phase;
- Recognize the preparedness infrastructure and other arrangements necessary for the transition phase;
- Analyse past emergencies in the context of the guidance for transition to different exposure situations.

Learning activities

- Lectures
- Case studies
 - Past emergencies
- Working session
 - Based on postulated emergency scenarios

Active participation is essential!

Expectations

- Better understanding of the guidance contained in IAEA Safety Standards Series No. GSG-11;
- Harmonized application of IAEA Safety Standards Series No. GSG-11 in national contexts.



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Thank you!