First Meeting of the Emergency Preparedness and Response Standards Committee (EPRessC)

30 November – 2 December 2015

Agenda Item EP3.3

Safety Guide on Arrangements for the Termination of a Nuclear or Radiological Emergency (DS474)

Status Update

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Incident and Emergency Centre
Background

• Safety Requirements No. GSR Part 7 (2015)

• Requirement 18: Termination of an emergency (transition from an emergency exposure situation to an existing exposure situation or to a planned exposure situation)
Background (cont.)

• **Safety Requirements No. GSR Part 3 (2011)**

• Section IV: Emergency exposure situation

• **Requirement 46**: Transition from an emergency exposure situation to an existing exposure situation
• **Safety Guide DS474 is intended:**
  
  • To provide guidance and recommendations in relation to respective Safety Requirements contained in GSR Part 7 and GSR Part 3
  
  • To addresses the goal of emergency response (para. 3.2 of GSR Part 7):

    “To prepare, to the extent practicable, for the resumption of normal social and economic activities”
History

• Document Preparation Profile (DPP) prepared
  • 1Q 2013
• DPP approved by review Committees
  • 3Q/4Q 2013
• DPP approved by Commission on Safety Standards
  • November 2013
• Drafting:
  • 2014 - 2015
Objective

• Objective

• To provide guidance and recommendations to Member States on developing arrangements for transition to either an existing or a planned exposure situation and for the termination of the emergency

• Including objective and prerequisites for the termination of the emergency
Scope

• Any nuclear or radiological emergency irrespective of the cause
Activities taken
1\textsuperscript{st} Consultancy Meeting

- 3 – 7 February 2014, Vienna

Objectives and outcomes:
- To initiate DS474 development
  - Extended contents developed
- To share national experiences
  - Past experience and national arrangements in place
- To identify key areas for coverage in DS474
  - List of such areas and concept that was used as a basis for further work
2nd Consultancy Meeting

- 30 June – 4 July 2014, Vienna

Objectives and outcomes:
- To continue drafting DS474
  - Contents expanded in more detail
  - Key areas upon which DS474 guidance is based were drafted
  - Most of the outcomes of 1st CS were addressed
3rd and 4th Consultancy Meetings

- 15 – 19 December 2014, Vienna
- 09 – 13 March 2015, Vienna

Objectives and outcomes:
- Drafting DS474 continued
Consultancy Meeting
Medical follow-up and surveillance

• Consultancy Meeting on medical follow-up and surveillance of persons following radiation emergencies

• 15 – 17 July 2015, Vienna

• Objectives and outcomes:
  • To share experiences and to discuss emergency arrangements for managing medical follow-up and surveillance following an emergency
    • Fruitful experience in the area shared
    • Guidance drafted
5th Consultancy Meetings

• 27 – 31 July 2015, Vienna

• Objectives and outcomes:
  • Drafting DS474 continued
  • The first draft produced in September 2015 based on the outcomes from this CS
Ad-hoc Working Group on DS474

- Established in **November 2014**
  - To increase the involvement of international organizations
  - Under the framework of Inter-Agency Committee on Radiological and Nuclear Emergencies (IACRNE)
  - Comprises of representatives of 7 international organizations

- Consultations with relevant international organizations (throughout 2015)
Internal consultations

• Throughout the drafting process (2014-2015) with colleagues working in relevant areas such as:
  • Remediation
  • Radiation protection
  • Radioactive waste management
  • …
Participation

- About 45 experts
  - From 17 Member States
  - From 5 international organizations
    - ICRP and NCRP Members
  - Relevant staff of the IAEA
Technical Meeting

- To review and discuss the first draft of the Safety Guide DS474 and to identify needs for its further improvement
  - 28 September – 2 October 2015
  - Attended by 52 Representatives
    - 41 Member States
    - 3 International Organizations
Technical Meeting (cont.)

- National regulations and respective plans are not in place in many MSs for transitioning to long term recovery and terminating the emergency as well as for lifting protective actions
  - Need for further work in the area recognized
  - Timeliness appreciated
- The complexity associated with the implementation of necessary technical and organizational arrangements for the transition phase recognized due to involvement of many different organizations and authorities
  - Safety Guide DS474 provides useful guidance
Technical Meeting (cont.)

- The balance and consistent coverage of all types of nuclear and radiological emergencies irrespective of the cause was welcomed.

- The current draft was considered comprehensive, pragmatic, clearly written and understandable:
  - No missing aspects of key importance had been identified.
  - None of its current contents was found to be superfluous.

- Feedback was obtained on a number of detailed aspects to be considered for further improvements.
President’s Summary:

Recommendation 5: Developing international guidance for the transition phase

“During the Conference, it was recognized that there is a need for a holistic approach when implementing a protection strategy. Challenges and issues were raised regarding the lack of guidance for the termination of a nuclear or radiological emergency and the transitioning to recovery, including remediation.

I recommend that, to address this issue, the IAEA continue to develop guidance on the termination of a nuclear or radiological emergency and the transition to recovery, which should include guidance for adapting and lifting of protective actions.”
Information to Standards Committees

- EPReSC, RASSC and WASSC
  - November 2015
Structure and contents
I. INTRODUCTION
   • BACKGROUND
   • OBJECTIVE
   • SCOPE
   • STRUCTURE

II. PHASES OF A NUCLEAR OR RADIOLOGICAL EMERGENCY
   • EMERGENCY PHASE
   • TRANSITION PHASE

III. PRIMARY OBJECTIVE AND PREREQUISITES
   • PRIMARY OBJECTIVE
   • GENERAL PREREQUISITES
   • SPECIFIC PREREQUISITES
     • Transition to a planned exposure situation
     • Transition to an existing exposure situation

TIMEFRAMES FOR THE TERMINATION
Current contents and guidance (cont.)

- IV. ARRANGEMENTS FOR THE TRANSITION PHASE
  - GENERAL
    - Authority, role and responsibilities
    - Management organization
    - 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
IV. ARRANGEMENTS FOR THE TRANSITION PHASE

- INFRASTRUCTURE
  - Plans and procedures
  - Training, drills and exercises
  - Logistical support and facilities
  - Quality management system

APPENDIX I CONSIDERATIONS FOR LIFTING PROTECTIVE ACTIONS AND OTHER RESPONSE ACTIONS

V. REFERENCES

ANNEX I CASE STUDIES

I.1. THE FUKUSHIMA DAIICHI ACCIDENT IN JAPAN
I.2. THE RADIOLOGICAL ACCIDENT IN GOIÂNIA, BRAZIL
I.3. THE SEVERE NUCLEAR INCIDENT AT PAKS NPP, HUNGARY
I.4. THE RADIOLOGICAL INCIDENT IN MEXICO

ANNEX II FACTORS FOR CONSIDERATION IN THE JUSTIFICATION AND OPTIMIZATION OF THE PROTECTION STRATEGY
Activities planned
Activities planned

• 4Q 2015 – 1Q 2016:
  • To address outcomes of the Technical Meeting
  • To held consultations (with Member States, international organizations, internal), as appropriate
  • To prepare the draft for submission to SSCs for first review in 2016
Thank you for your attention!