International Atomic Energy Agency

Current status of the Decommissioning Termination Working Group

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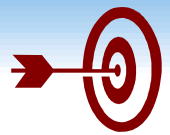
Decommissioning termination WG

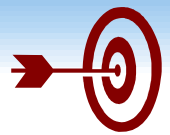
- Scope and objectives
- Background, important definitions
- Chapter 5 overview
- What we have done since 2009
- Current status
- Further topics for discussion

Objectives



- Document Member States (MS) experiences regarding decommissioning termination and supporting safety assessment (SA).
- Provide guidance to assist the planning, conduct and implementation of activities directly related to operator applications to terminate a license.

Objectives



❑ The Decommissioning Termination chapter:

- Summarises and expands upon existing guidance associated with applications to terminate a licence.
- Surveys national regulatory approaches to decommissioning termination (legal and regulatory frameworks, documentation required by the regulatory body…).
- Documents relevant MS experiences to demonstrate that an appropriate end state has been achieved.

Scope

- The scope extends beyond the general FaSa objective to consider the implementation and evolution of SA.
- Addresses the activities undertaken by ***operators*** when applying to terminate a licence.
- Regulatory review of Decommissioning Termination is addressed by the Review Working Group.

Background

❑ Working Groups members until today…

Kremena IVANOVA	**Bulgaria**
Don Howard	**Canada**
Kerstin KUEHN	**Germany**
Stefan THIERFELDT	**Germany**
Yukihiro IGUSHI	**Japan**
Alexandru RODNA	**Romania**
Olivier LAREYNIE	**Spain**
Jose Luis REVILLA	**Spain**
Vik WINSPEAR ROBERTS	**UK**
Anthony HART	**UK**

Important definitions

❑ Decommissioning termination:

"Technical and administrative actions implemented at the end of decommissioning associated with the removal of a site (or part of a site) from regulatory control"

Objective: demonstrate that the end state, as defined in the decommissioning plan, has been successfully reached.

❑ Safety assessment (in this chapter):

Refers to evaluations of the future safety of persons potentially affected by doses from the released site, rather than an assessment of the safety of persons potentially affected by the decommissioning activities.

Chapter 5 overview

❑ Review of national regulatory framework

3 main approaches to "safety assessment" have been identified:

Approach	Definition	Release criteria
A	SA is carried out by the operator during decommissioning planning using scenarios relevant to the proposed end state.	Optimised site-specific release criteria proposed by the operator (usually Bq/g).
B	SA is carried out by the operator once the decommissioning has been completed.	Generic criteria supplied by the Regulatory Body (μSv/y or Bq/g).
C	Generic SA are carried out by the regulator, leading to non-site-specific release criteria. The operator demonstrates that its end state is consistent with these assumptions.	Generic criteria supplied by the Regulatory Body (μSv/y or Bq/g).

Chapter 5 overview

❑ Review of national regulatory framework

Approaches to dose criteria:

- Usually, Member States establish an acceptable post-decommissioning dose and operators develop concentration-based criteria.
- Criteria are quite similar and consistent with IAEA guidance (WS-G-5.1): up to 300 μSv/year, though the majority uses 100 μSv/year.

Chapter 5 overview

❑ Review of national regulatory framework

Approaches to Restricted Release and institutional controls:

- The majority of MS does not have examples of practical implementation of institutional controls.
- Main difficulty: identification of an appropriate regulatory framework to ensure that institutional controls remain in force.
- But some requirements were identified: ALARA considerations, stakeholders involvement, identification of the restrictions on present and future landowners, long term monitoring…

Chapter 5 overview

- **Operator activities,** 4 essential steps:

1. Set out the input assumptions to the SA.
2. Identify relevant regulatory criteria and regulations.
3. Undertake scenario modelling.
4. Demonstrate compliance with criteria and regulations.

Chapter 5 overview

❑ Operator activities

Input information to perform SA:

- Anticipated or actual end state conditions.
- Physical, radiochemical and environmental data, etc.

Identification of relevant regulations and criteria:

- Identification needs to be done at the decommissioning planning stage to ensure the planned end state will allow termination to take place.
- Choice of criteria may also be influenced by relevant stakeholders, such as other government bodies or regulators, regional government and public groups.

Chapter 5 overview

❑ Operator activities

Scenario modelling:

- Wide range of scenario modelling techniques employed.
- Selection of scenarios and pathways, identification of critical groups.

Demonstration of compliance:

- Assessment of documentation, inspections and surveys.
- Need to be transparent, auditable and of sufficient detail.

Final Radiological Survey is discussed

Chapter 5 overview

- **Multi-facility site**
  - Specific issues to be considered.
  - Definitions of interim and/or final end states.

- **Information for end state demonstration**
  - What is required in support of a license termination application.
  - Examples for final decommissioning reports and final radiological survey plans and reports.

What we have done since 2009

- A new draft chapter was drafted and reviewed after 2009 meeting in Bonn.
- Slightly amended during the coordinating WG meeting in April 2010.
- Send to WG members for comments in August 2010.
- As planned, no meeting was required in 2010.

What could be improved?

- **Member States' experiences regarding:**

  - **Scenario modelling (section 5.2.3)**
  - **Implementation of institutional controls in the case of restricted release (section 5.4)**

- **Feedback from Test Cases and other WG.**

Chapter 5 may still be improved!

Thank you for your attention!

Comments or questions?