

Accepted and Sustainable Radiological Protection Decisions During Nuclear Reactor Decommissioning: Experience in Sweden from a Regulator's Point of View

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OECD-NEA Stakeholder Dialogue: Experience and Lessons for Young and Old Experts and Researchers

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This presentation

- The Swedish Radiation Safety Authority, SSM
- SSM's Core Values
- Features of the national programme
- Decommissioning in Sweden
- SSM's interactions in the context of decommissioning
 - ➤ 4 examples
- Concluding remarks communication, transparency & participation

The Swedish Radiation Safety Authority, SSM

- National regulatory authority
- Ca 300 employees
- Ca 50 million EUR annual budget
- Mandate within the areas of nuclear safety, radiation protection and nuclear nonproliferation
- 700 licence applications per year
- 300 individual supervisory actions per year

SSM's roles

- regulates, supervises and gives authorisations
- issues advice and recommendations to other authorities and the general public
- maintains emergency preparedness 24/7
- contributes to research
- contributes to safety and security internationally
- measures radiation levels and calibrates instruments.

SSM's organisation



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SSM's Core Values

> Reliability

 work on the basis of facts, staff who are competent, objective and impartial

Integrity

 maintaining independence in decisions, viewpoints, advice & recommendations

> Openness

 transparent to the outside world, clearly and proactively provide information about our work, viewpoints, advice, recommendations & decisions, willingness to consider external views

Features of the national waste programme

- Consistent long term national strategies & planning
 - Integrated approach to waste & decommissioning
 - Continuous research & development program
 - Implementation of storage & disposal solutions
 - Financial arrangements in place and working
- Clear division of responsibilities between actors
- Integrity, competence & independence of the regulator
- Openness & transparency, active stakeholder involvement

The context of decommissioning in Sweden

- Limited experience todate
- A number of projects underway & imminent
 - Ranstad facilities
 - Research facilities
 - First commercial NPP
- Further closure of NPPs
- Interactions with waste management system



SSM's interactions in the context of decommissioning

- Four examples:
 - ➢ In SSM's <u>decisions</u>
 - Reviews
 - Regulatory supervision
 - Where SSM gives inputs <u>as a stakeholder</u> into other decision-making processes
 - Where SSM needs to be aware of <u>decisions</u> <u>taken by other competent organisations</u>

SSM's decisions: reviews

- e.g. SSM's reviews of aspects of planning for decommissioning; review of R, D, & D programmes; financing provisions
- Based on submissions, application from industry
- SSM seeks and receives input from a range of stakeholders
 - Dialogue with stakeholders
 - SSM's initial review circulated & published for comment
 - Stakeholders comments explicitly addressed in SSM's final review and proposals/decisions

SSM's decisions: regulatory supervision

- e.g. SSM's regulations for and supervision of activities involving radiation
- SSM's task is a supervisory one to ensure that the party responsible conducts activities safely
- SSM engages with stakeholders in order to:
 - Formulate regulations for activities involving radiation
 - Check compliance with applicable rules and regulations
 - Inspect facilities and their use
 - Process applications to establish or alter activities
 - Review and make decisions regarding licences & advise the Government on licensing matters

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SSM gives inputs into other decisionmaking processes

- e.g. SSM provides expert advice related to decommissioning project decisions pursuant to the Environmental Code
- Dialogue with industry and other competent authorities prior to application to the Court
- Review of the application by SSM
- Formal advice & testimony submitted by SSM
- Binding judgement by Court, to be followed by all parties in their respective activities

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Impact of decisions taken by other competent organisations

- e.g. building permit decisions taken by local authority on interim waste storage
- SSM needs to be aware of the decision and analyse the implications
- May need to be taken into account by SSM:
 - In its direct regulatory oversight roles
 - Because of potential indirect effects on the planning or execution of decommissioning projects, timing, cost projections, etc

Communication, transparency & participation in SSM's work

- Public insight into regulatory activities & role in decision-making
- Legal provisions for transparency and public participation, rights of access to information
- Opportunities for effective participation as part of the decision-making process
- Active stakeholder involvement, incl. financial support to NGO's

Parting thought: adapt to circumstances!

- Cultures (and contexts) vary
- Stakeholder dialogues need to take this into account
- For example, this illustrates a "typical" Swedish interaction...



But, avoid generalisations – every context is special!

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Source: "When cultures collide", R. Lewis, 3rd edition, 2005



Thank you!

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