



Oversight of a deep geological repository: demands and expectations Cliente: from local communities

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RICOMET Conference, Brdo Castle, Slovenia, June 2015





Oversight (Cambridge dictionary online)

- 1. A mistake made because of a failure to notice or do something;
- 2. Responsibility for a job or activity and for making sure it is being done correctly.

International Commission on Radiation Protection (ICRP-122)

General term for 'watchful care' and refers to society "keeping an eye" on the technical system and the actual implementation of plans and decisions.

It includes regulatory supervision and control, preservation of societal records and societal memory of the presence of the facility.





Methodology

Monitoring

RK&M

Stakeholder

Oversight

Aim

To explore the position of local communities on monitoring and on the preservation of RK&M and the relationship to confidence.

Objectives

To explore the interest of local communities on monitoring and RK&M of RWM facilities.

To analyse their concerns and expectations.





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Oversight

- Desk study, including a review of FSC literature and RWMC RK&M project.
- Short illustrative survey addressed to FSC delegates on local communities' interest on monitoring and RK&M in pre-operational, operational and post-operational phases.
 - ➤ July August 2012
 - > FSC members (11 countries replied)
 - > 10 questions
- ➤ Further input gathered through 25 interviews from 7 countries implementers, regulators & local stakeholders (September 2012 March 2013)
- ➤ Participant observation at MoDeRn Conference in Luxembourg (19-21 March 2013).





Methodology

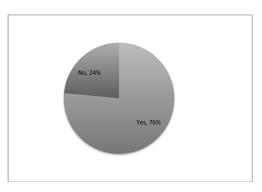
Monitoring

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- > 17 responses (implementer, regulator, government) from 11 countries (Be, Ch, Cz, Es, Fi, Fr, Hu, It, Se, UK, US)
- > Are local communities asking for monitoring of **RWM facilities?**







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➤ In **Hungary**, trained municipal groups perform regular control of incoming waste packages and environmental monitoring afterwards in the LILW repository and the interim spent fuel storage facility in Paks.







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- ➤ Understanding of "monitoring" from local communities and institutional actors is different and country-specific.
- Level of interest in monitoring depends on the country.
- ➤ In **France**, local population expect CLIS Bure to have a role in monitoring the environment and health (NEA, 2010).
- ➤ In **Finland**, no demands are reported from the local level on monitoring the repository.





Methodology

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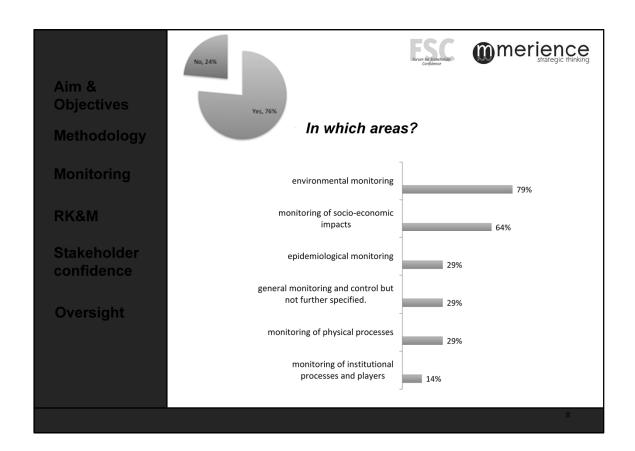
RK&M

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➤ In **Sweden**, little attention paid to monitoring until recently, with the review of the licence.

- Östhammar municipality asks SKB to address the possibility of monitoring becoming a legal demand and;
- monitoring to be considered throughout the whole process, from construction to operation and closure.
- ➤ In **Canada**, further elaboration is needed on the nature and extent of monitoring in the Adaptive Phase Management approach.
- ➤ **Sweden**, **UK** and **Belgium** involved in MoDeRn FP7 project and NEA RWMC RK&M international project to learn more on monitoring.





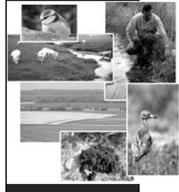


➤ In France:

- CLIS Bure requested epidemiological monitoring.
- CLI Soulaines carries out biomonitoring projects at the vicinity of Centre de l'Aube.
- Andra established the Permanent Environmental Observatory in 2007.

Andra ecothèque www.andra.fr









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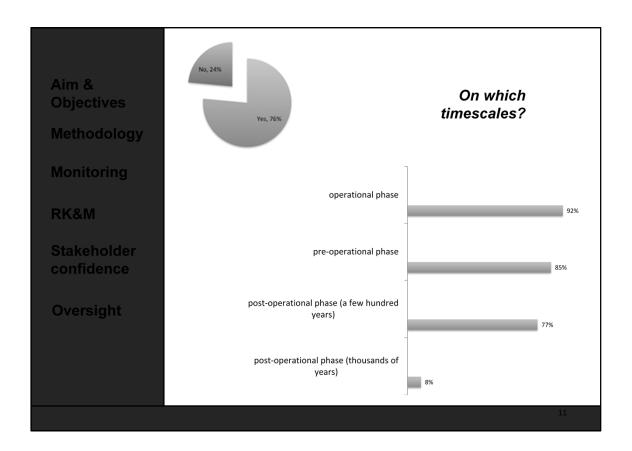
> In US WIPP

 the Carlsbad Environmental and Monitoring Research Centre at New Mexico University is an oversight independent body to inform the public and environmental science community of environmental and health monitoring results.



Lie down and be counted Project http://www.cemrc.org

 In Yucca Mountain, Nye County proposed a comprehensive programme of monitoring, including socio-economic factors.







Methodology

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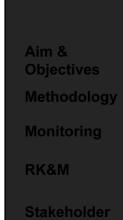
RK&M

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Requests for monitoring during the postoperational phase are not so clearly articulated by local communities, compared to preoperational and operational phases.

- ➤ In **Sweden**, demands are not specific enough to define critical issues nor timescales. Will be further defined as part of on-going licensing process.
- ➤ In **Canada**, a small group in dialogue workshops objected to long-term monitoring, especially if it were to be intrusive in nature (integrity and unnecessary).
- ➤ In some cases, too early to discuss specific issues in the post-operational phase.



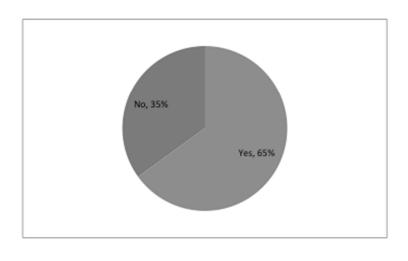
confidence

Oversight





> Are local communities showing an interest in RK&M preservation?









- There is hardly evidence of a strong formal demand of preservation of RK&M by the local level.
- But there is an implicit interest to know how it will be addressed, especially as implementation of a geological repository approaches.
- ➤ Discussions with local population and research on memory keeping undertaken in **France**.
- > In the **US**, "on and off" at local level.
- ➤ Importance of involving the **local level** but also regional, national and international levels.

http://www.constructing-memory2014.org





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- ➤ Monitoring: key issue to ensure **safety**, guarantee transparency and strengthen confidence.
- > Importance of involving **independent** oversight bodies in monitoring and reviewing for building public confidence.
- ➤ In some countries, monitoring and memory preservation inextricably linked to reversibility and retrievability (R&R).
- > Active role of communities in defining monitoring aspects: what to monitor, why, who would be in charge, how much it would cost, etc...







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Oversight, as conceptualised by the ICRP and NEA, might provide a useful framework for embracing monitoring and RK&M preservation, as argued in the RK&M project.

Oversight is a general term for 'watchful care' and refers to society 'keeping an eye' on the technical system and the actual implementation of plans and decisions. Oversight measures should be discussed with stakeholders and society at large (ICRP-122).





