Supplement of Saf. Nucl. Waste Disposal, 2, 241–242, 2023 https://doi.org/10.5194/sand-2-241-2023-supplement © Author(s) 2023. CC BY 4.0 License.





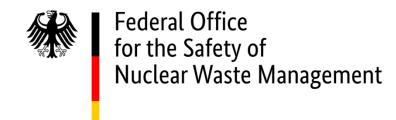
Supplement of

Preserving awareness for oversight – towards a resilient system at social level over centuries and millennia

Stephan Hotzel and Benjamin Offen

Correspondence to: Stephan Hotzel (stephan.hotzel@base.bund.de)

The copyright of individual parts of the supplement might differ from the article licence.



Preserving Awareness for Oversight:

Towards a Resilient System at Social Level over Centuries and Millennia

Panel session, moderated/organised by <u>Stephan Hotzel</u> & Benjamin Offen

Federal Office for the Safety of Nuclear Waste Management (BASE)

Interdisciplinary Research Symposium on the Safety of Nuclear Disposal Practices safeND 13-15 September 2023

Panellists:

- Prof. Dr. Werner Rühm
- Prof. Dr. Miranda Schreurs
- Claudio Pescatore (PhD)



Oversight, a concept promoted by ICRP & NEA

• **Oversight:** "Watchful care" of the repository – society "keeping an eye" on the technical system and the actual implementation of plans and decisions.

• **Direct oversight:** When waste is accessible (operational phase)

Indirect oversight: When waste is no longer readily accessible (post-closure phase)

No oversight: No "watchful care" anymore / memory lost (in the long-term)

Typical oversight measures:

• **Direct oversight:** Regulatory supervision (control and inspection)

Indirect oversight: Monitoring, preservation of records, land use controls, societal

memory keeping, reporting under international conventions

No oversight: -



Oversight, some key aspects (1/3)

- "The level of oversight affects the capability to control the source [...] and to avoid or reduce potential exposures." (ICRP, 2013)
- "The disposal facility is ... to be seen as a functional [nuclear] facility." (ICRP, 2013)
- Can we walk away from a functional facility?



Oversight, some key aspects (2/3)

- "There is no intention to abandon repositories for geological disposal of radioactive waste, either before or after closure. The RWMC accepts and adopts the ICRP-122 position on the relevance of maintaining oversight over the geological disposal of radioactive waste for as long as practicable." (NEA, 2014)
- ← For as long as practicable? How long is that?

Oversight, some key aspects (3/3)

- "Maintaining RK&M for a radioactive waste repository after its closure will allow future members of society to take informed decisions regarding the repository and its contents and to prevent inadvertent human intrusion." (NEA, 2014)
- "Enabling future members of society to make informed decisions is part of responsible, ethically sound, sustainable radioactive waste management, and is in line with a prudent approach regarding safety." (NEA, 2014)
- Wouldn't it be better to forget?



Panellists

- Prof. Dr. Werner Rühm
- Prof. Dr. Miranda Schreurs
- Claudio Pescatore (PhD)

Thank you for discussing with us!



Interdisciplinary research symposium on the safety of nuclear disposal practices