

Knowledge and memory preservation of final disposal of nuclear waste: Searching for a Finnish approach

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Questions

- Knowledge and memory preservation especially for the **post-closure** phase of final disposal
 - Studied recently by Nuclear Energy Agency's project on Records, Knowledge and Memory (RK&M)
 - Finland's leading role in final disposal but hardly there in those RK&M results
- What has been done on this theme previously in Finland, and what are current expert thoughts?
 - Sources: publications of all kinds, interviews

Safety significance

- Improved understanding nationally of the importance of knowledge preservation
- Avoiding loss of information & knowledge
- Raising the question of remembering, of societal or cultural memory
- What can **be done** from now onwards and in coming decades, for the safety of the future generations?
- Supporting long-term acceptability of final disposal, site security and safeguards

Little previous discussion or research in Finland

- Thomas Sebeok's guest talk on atomic/nuclear semiotics in Helsinki 1981, incl. atomic priesthood
- Essay by Heikki Niini 1986 (ethical acceptability of final disposal): need to save information only
- Government Decision (Valtioneuvoston päätös) 398/1991 included permanent preservation of waste package information
- Nordic project on knowledge preservation, lead by Mikael Jensen (1993)
 - Also a "ghost manuscript" Loppusijoituksen jälkeen / After final disposal (by Arto Ylinen): this not found yet
- Decision in principle (2001) on final disposal with also retrievability discussed and included
- But after that seen as "unnecessary for now".

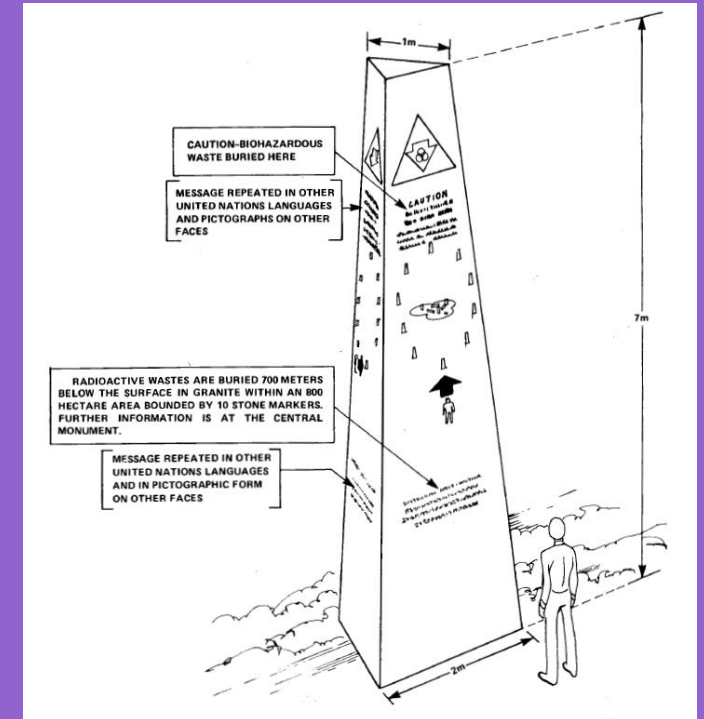
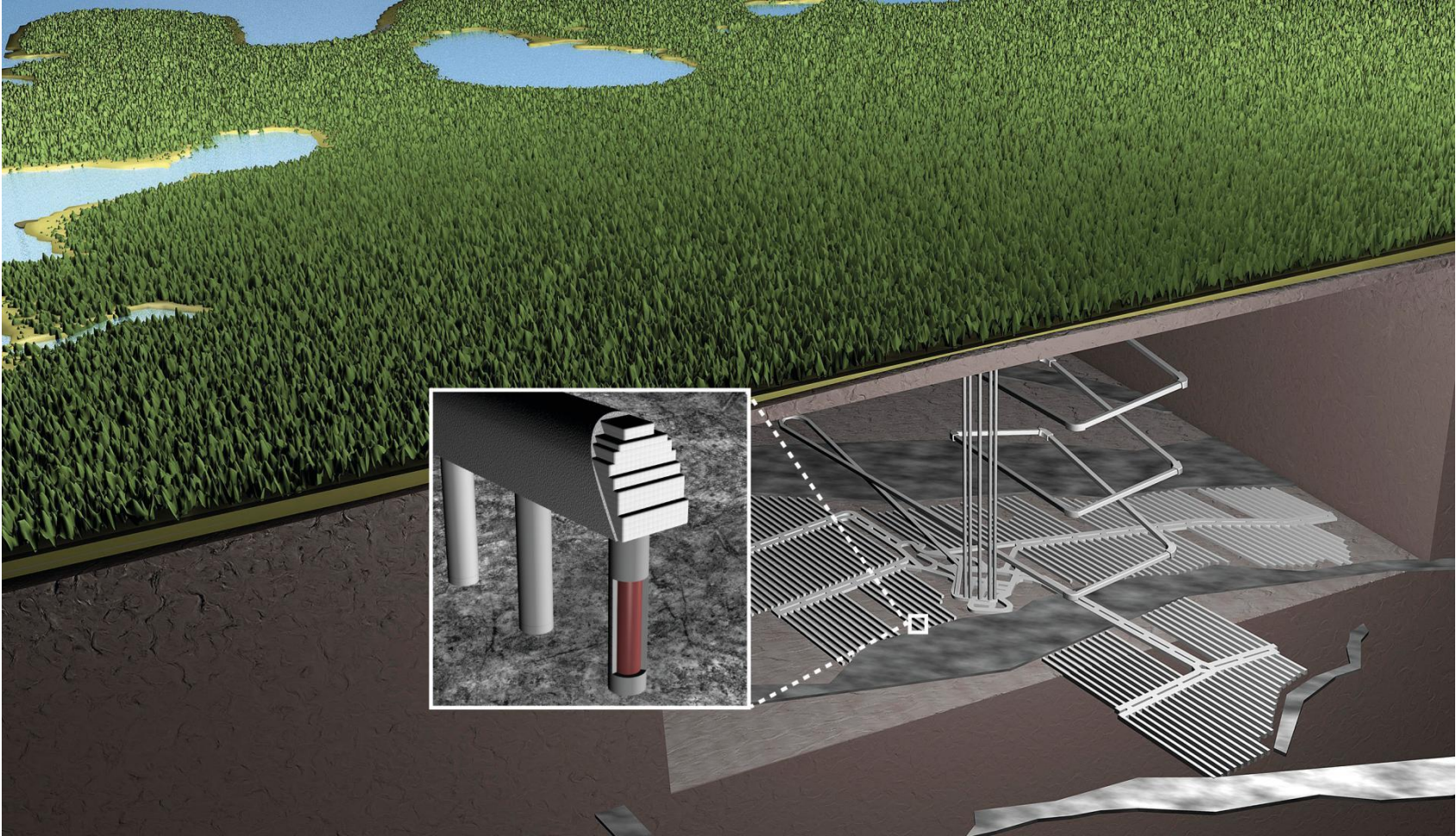


Image: Human Interference Task Force report 1984.

Experts' views

- At present Posiva/TVO archiving, eventually handed to the state
- Experts perceive knowledge preservation as important in principle but forthcoming in a distant future
- Some say even impossible to work on such an issue nowadays, few admit more attention should be paid
- Most foresee that knowledge (and memory) preservation becomes relevant and timely with ONKALO's **closure**
- Passive system concept perceived safe without remembering
- Discuss markers and similar ideas, **open** to future decisions

After 4000 years. Image by Posiva (2021)



Follow-up and recommendations

- Study NEA's work on preservation, join and contribute to that, for instance developing Key Information Files
- Artistic contributions and comments available too in Finland and beyond
- Knowledge preservation as a potential part of
 - Operating licence
 - Periodic Safety Reviews
- Nuclear Heritage as an asset, worth saving, looking after and something to work with!



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Thank you!

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