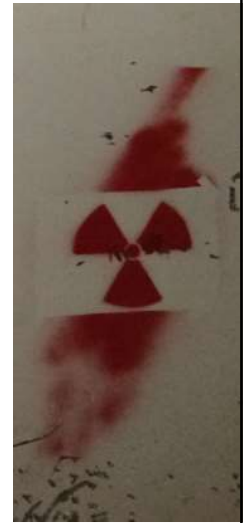


Overview of Deep Geological Repository projects in the EU and participation possibilities

Joint Project Webinar on the status of Deep Geological Repository preparation and connection to draft EU Taxonomy on 6 May 2022

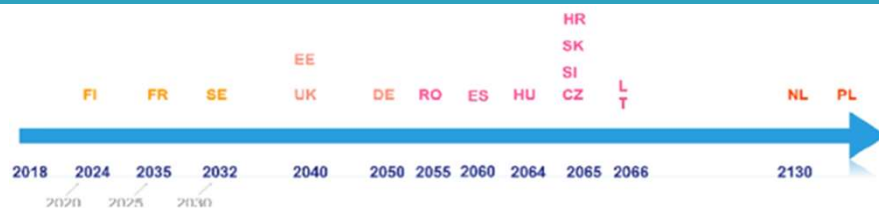
Gabriele Mraz



The Joint Project is supported by
Federal Ministry
Republic of Austria
Climate Action, Environment,
Energy, Mobility,
Innovation and Technology

1

Status of deep geological repository projects in the EU



- EU Member States have to report to European Commission on their national nuclear waste management programs according to Directive 2011/70/Euratom.
- This figure shows the scheduled operation starts of spent fuel and other high level waste (HLW) repositories (EC-Report 2019): <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019DC0632&from=EN>, p. 9
- Finland: is in the process of issuing an operation license
- Some nuclear countries are missing altogether: Belgium (2080 at the earliest according to information during EIA on Doel 1&2 LTE), Bulgaria, Italy
- Some countries have their hopes on multinational solutions for HLW (Slovenia & Croatia, Netherlands, Italy)

2

Overview over participation procedures for DGRs on national and transboundary levels

- Environmental Impact Assessment (EIA) and licensing procedures for final repositories
 - Finnish DGR Onkalo: EIA 2008, construction license was issued 2015, now consultation is open for the operation license until Sept 2022
 - EIA Swedish spent fuel repository 2008-2010, transboundary part 2016, for supplementary information on copper canisters 2021 (only for Germany and Poland); consultation during licensing see Johan Swahn's ppt
- Strategic Environmental Assessment (SEA) on national nuclear waste management programs
 - Not all national nuclear waste management programs have been subjected to an SEA
 - A SEA should be conducted (again) in case of substantial changes (f.e. the decision for the KBS method)
 - Finland: EIA on update of the national waste management program 2021
- EIA for NPP newbuild and lifetime extensions
 - EIA Reports have to include information on nuclear waste management including back-end management
 - In the last years, in some EIAs the use of the KBS-3 method in a future national DGR was announced

3

Examples how KBS-3 method is recently discussed in EIA and SEA procedures

- Slovenia – Krško EIA on lifetime extension
 - EIA Report 2022: Slovenia and Croatia envisage a joint DGR. "The Swedish repository concept KBS-3V is envisaged." (p. 293)
 - Upcoming events where this can be discussed further: Public Hearing in Austria on 19 May 2022, bilateral consultations AT-SLO
- UK – Sizewell C EIA on NPP newbuild
 - EIA Report in 2020: "The Radioactive Waste Management Ltd disposal concept for High Level Radioactive Waste and spent fuel is based on the Swedish KBS-3V method." (Vol 2 Chap 7, p. 44)
 - Ongoing: bilateral consultations AT-UK with a possibility to further discuss this

4

Consultation on the Onkalo operation license application

- Open 8 Feb until 15 Sept 2022
- <https://tem.fi/en/posivas-operating-licence>
- The operation license is for the period March 2024 to the end of 2070 (the closure is envisaged for the late 2120-ies, therefore the license will not cover the whole operation period)
- The Joint Project wants to prepare a statement

5

Taxonomy
criterion: Plan
to have an
operating HLW
repository by
2050

- Criterion valid for all new NPP with construction permit issued by 2045, but not for all existing NPP
- **Most countries will not be able to fulfil this criterion**



6

DGR and Taxonomy

- How does a plan for a DGR until 2050 has to look like?
- It is not clear yet what plan will be accepted as realistic by financing institutions
- It needs to have detailed steps (and the choice of a method is such a step)
- It is not clear what will happen if the steps will not be implemented as planned
- Conclusion: A DGR plan will look more realistic if a method like KBS-3 is envisaged instead of no method at all, even if it is not proven to be safe enough

7

Contact

- Thank you for your attention!
- Contact: mraz@ecology.at
- Joint Project – Nuclear Risk & Public Control: <http://www.joint-project.org/>

8