

A 3D cutaway diagram of a geological disposal site. The top layer shows a green landscape with trees and a small building complex. Below the surface, the ground is shown in various shades of grey and white, representing different geological layers. A large, rectangular structure is visible in the middle ground, representing the disposal facility. The structure is composed of multiple layers, with a central core and outer containment layers. The diagram illustrates the depth and complexity of the geological disposal process.

# The Role of Optimisation in Radioactive Waste Geological Disposal Programmes

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# Vision 2040

## 2040 – Towards industrialisation of radioactive waste disposal in Europe

### Safely operate

the first geological disposal facilities in Europe

### Optimise & industrialise

planning, construction and disposal operations

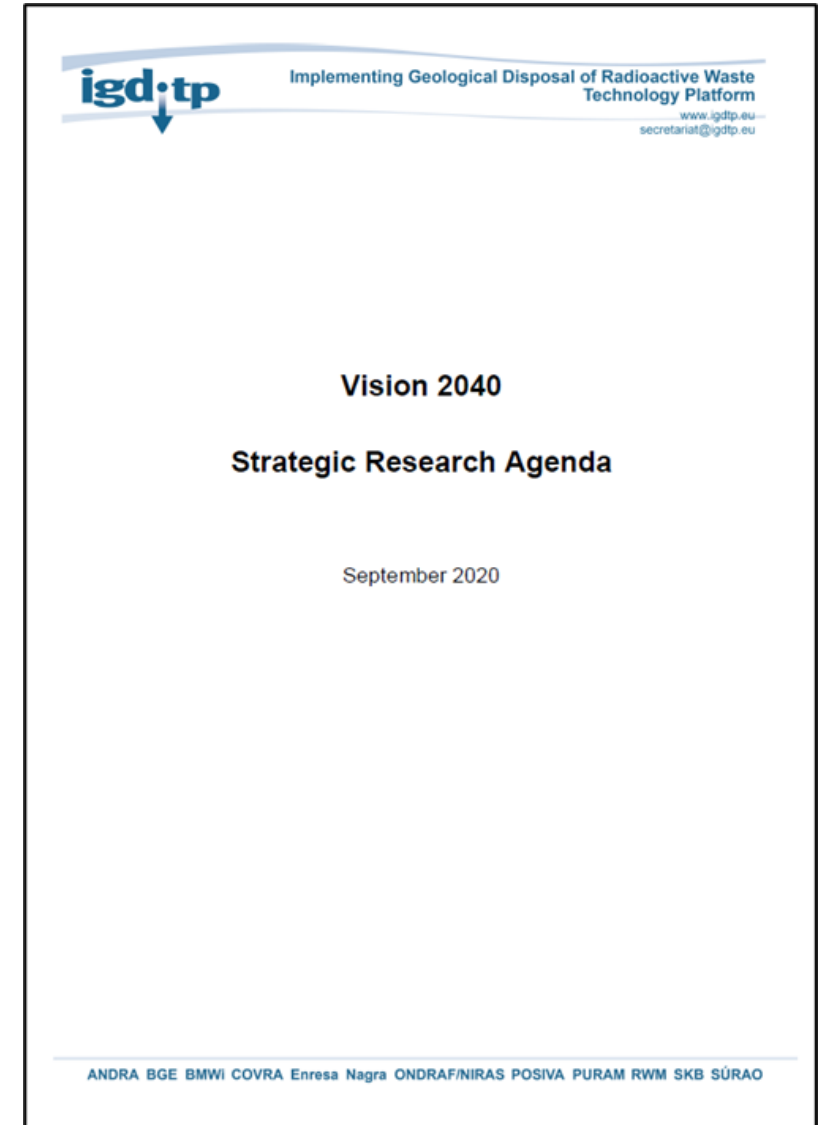
### Tailor solutions

for disposal of the diverse waste inventories in Europe



*It develops European strategic initiatives to facilitate the stepwise implementation of safe, deep geological disposal of SF, HLW and other long-lived radioactive waste*

- Pooling of European resources
- Co-ordination of future projects around a common SRA
- Secure finances for implementation of the projects
- Create synergies with other international organisations and initiatives



# Why a symposium on optimisation?

- Geological disposal projects are multi-billion endeavours.
- Optimisation of all aspects is a continuous activity throughout its implementation.
- Next to safety optimisation, optimisation of the implementation is gaining attention.
- This symposium aims to summarise the status of the main aspects from a technical-scientific viewpoint and to discuss future directions.

# Where are we on optimisation?

- Most advanced in pioneering programmes such as that of Posiva, SKB and Andra.
- There is a chance for other programmes to step benefit and align earlier with the optimization logic.
- As repository optimization is emerging in the community, it is currently broadly defined and covers diverse aspects:
  - optimisation in national programmes
  - technology and material optimisation
  - lessons learned from elsewhere
  - integrating optimisation for safety
  - holistic optimisation approaches





Have fruitful days!

Big thank you to the organising and scientific committee!

**Local Committee:** Ingo Blechschmidt, *Nagra*; Annika Breu, *Nagra*; Tamara Baldwin, *GSL*

**Scientific Committee:** Tamara Baldwin, *GSL*; Ingo Blechschmidt, *Nagra*; Johanna Hansen, *Posiva*; Tiina Jalonen, *Posiva*; Axel Liebscher, *BGE*; Jon Martin, *NWS*; Maarten Van Geet, *ONDRAF/NIRAS*



**Registration for the webinar on 29 September still open!**