Nagra RD&D perspective

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Programme stage

- **Next milestone**: submission of the general licence - fixing the site and the conceptual design of the geological repositories

- Site characterisation in three sites at full speed: 3D seismics, deep drilling

Selected sites for the last stage in the site selection process

- Jura Ost (AG)
- Nördlich Lägern (ZH, AG)
- Zürich Nordost (ZH, TG)
Highest RD&D priorities – deadline 2023

- Understanding of the glacial and other erosion processes at the selected sites close to the Alps (mainly HLW)
- Demonstration of gas transport in sand/bentonite seals in case the permeability of the clay hostrock is very low (mainly LLW)
- Desk based development of a tunnel construction method requiring minimal support at greater depth reliable assessment (and constraining) of the EDZ development
- Developing a facies specific geomechanical database based on drilling outcomes and in-situ stress estimation at different scales
- Developing a monitoring concept (integrating Modern 2020)
Drivers of the RD&D priorities/topics

• Understanding of the glacial and other erosion processes at the selected sites close to the Alps (mainly HLW)
  • performance assessment and site selection

• Demonstration of gas transport in sand/bentonite seals in case the permeability of the clay hostrock is very low (mainly LLW)
  • performance assessment, optimization for safety

• Desk based development of a tunnel construction method requiring minimal support at greater depth including a reliable assessment (and constraining) of the EDZ development
  • construction feasibility, optimization

• Developing a facies specific geomechanical database based on drilling outcomes and in-situ stress estimation at different scales
  • performance assessment and site selection

• Developing a monitoring concept (integrating Modern 2020)
  • regulatory requirement
thank you for your attention