What is needed for success in disposal regulation – Finnish regulatory expertise at your service

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Nuclear Waste and Material Safeguards Regulation
Mission:

Protecting people, society, environment, and future generations from harmful effects of radiation
Regulatory approach for disposal

Late 1970’ - 2000

Decision-in-Principle

First safety requirements
Review of developing safety case
Dialogue with Posiva and stakeholders

2001 - 2015

License application review strategy
Oversight of ONKALO construction
Competence building

2016 - 2023

Application for the operating license

Updated safety requirements
Oversight of encapsulation plant and disposal facility construction
Learning from experiences and changing regulatory position

Transition from idealism "discovering a geologically superior site" to realism: "selection of a societally favourable, geologically adequate site"

Transition from issue based review "we need to solve all scientific debates" to safety based review "we need be assured about safety"

From R&D to industrial process?
STUK’s regulatory expertise

• Up-to-date and state-of-the-art safety regulations for disposal

• Regulatory approaches for repository licensing and oversight of construction

• In-house expertise for all safety relevant fields

• Approach for regulatory interaction and dialogue with applicant and stakeholders
Professionals at your service

- Stuk International Ltd. develops and improves radiation and nuclear safety worldwide.
- Support in
  - Development of regulatory framework.
  - Establishment of organizational structure of regulatory body.
  - Recruitment assistance of key personnel. (advisory service - no recruitment as such)
  - Development of safeguards and physical protection standards and systems.
  - Capability and knowledge development.

Utilization of STUK resources
Key success factors in STUK’s regulatory work

**Commitment and courage to decision making**
- Commitment to national policy and strategy
- Implementation of step-wise approach

**Active involvement, development of regulatory framework**
- Clear regulatory framework
- Development of regulatory approach parallel with R&D
- Timely and focused communication with the stakeholders

**Competence development**
- Regular follow-up and review of the spent fuel disposal program
- Regulators safety assessment capabilities
- Active dialogue with Posiva
STUK

Radiation and Nuclear Safety Authority

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