



Introduction

- Small steering group project
- Interdisciplinary team: natural science, engineering, social science
- Research questions:
 - Overall safety in Finnish context
 - Representation of overall safety in safety case methodology

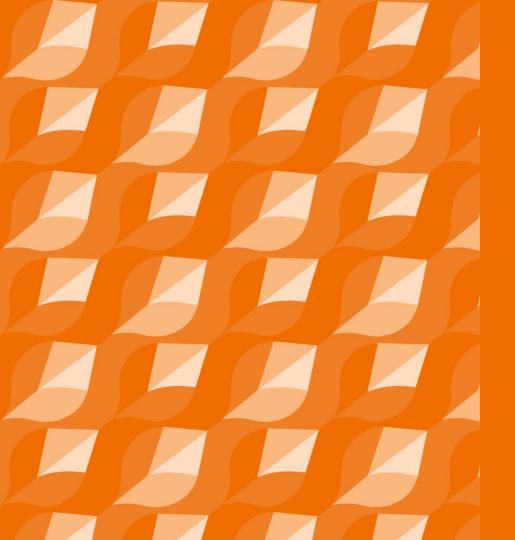




Introduction

- Methods
 - Literature review starting from the SOTA Safety Culture and Safety Case concepts
 - Structured in-depth interviews of 17 RWM experts at VTT
- Dissemination of results:
 - VTT report series publication <u>www.vttresearch.com/sites/default/files/pdf/technology/2019/T364.pdf</u>
 - Final report http://kyt2022.vtt.fi/
 - Open seminar 25.10.2019





Interviews Selected findings



Safety culture

- Change in mind-set noticed at implementer during transition from research focused organisation to operating company
- Imperfection: possibility of mistakes and to admit lacking knowledge
 - honesty and speaking up when noticing a mistake is appreciated
 - proper pre-conditions for addressing mistakes? (schedules, budget)
 - redundancy of expertise necessary to discuss concerns
 critical knowledge, compartmentalization of knowledge



Compartmentalization of knowledge

- Division and distribution of information to different contractors
- Experts working isolated and exclusively on certain topic. Often no (equivalent) redundancy of expertise
 - exchange of expert opinions with similar in-depth understanding limited
 - danger of loss of knowledge with retirement of experts (critical knowledge?)
- Confidentiality may constrain information flow between experts
- Commercial reasons may constrain Finnish-Swedish collaboration



Competence and knowledge mgmt.

- Danger of future dependence on expertise abroad
- Definition of "critical" competence desirable (knowledge transfer)
- Attractivity to work in nuclear field in Finland
 - close to solve final disposal problem
 - approx. stagnant NPP fleet
 - remote area (Olkiluoto, Hanhikivi)
 - reputation/perception of nuclear in future
- Challenges in research funding (industry, public)



Future activities?

- Idea: extension of interviews to several stakeholders
 - Finnish NWM community and institutional strength-in-depth (ISiD)
 - compartmentalization of knowledge and decision-making
 - communication of assumptions and uncertainties between specialists and generalists
 - critical knowledge: definition, preservation and transfer
- Proposal unsuccessful. Refine and try again after completion of Posiva's and TVO's current safety case work



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