

EPIC - Effective improvement of leadership and safety culture

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09/04/2021 VTT – beyond the obvious

Project overview

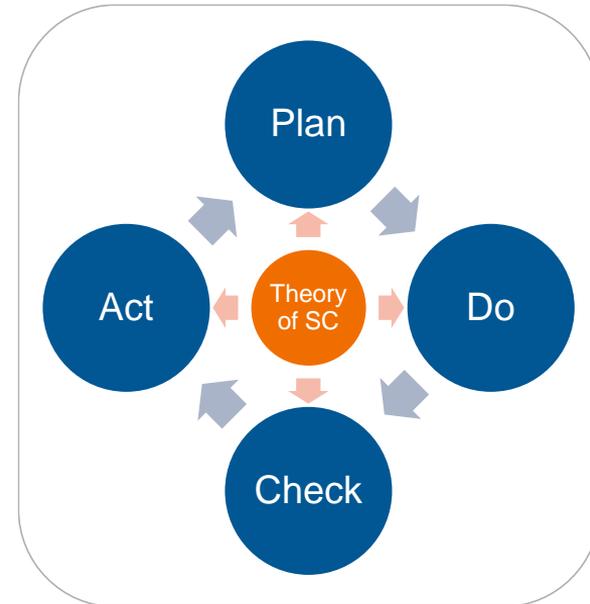
- **Motivation**: Leadership for safety has been increasingly topical issue after introduction of GSR Part 2. Safety culture improvement, what are the effective practices, and what makes them effective, has received little research attention.
- **Goal**: Develop knowledge and approaches that support effective improvement of nuclear safety through **leadership and safety culture**. Outcomes of the study are expected to support the **design and evaluation of safety culture improvement and leadership activities**.

Methodological approach

- The project examines leadership and safety culture improvement from two perspectives
 1. The work of safety culture experts
 2. The activities of leaders
- We apply a positive approach: What is perceived and experienced as effective and useful, and why?
- Data is collected in all Finnish nuclear power companies using interviews, workshops and document review

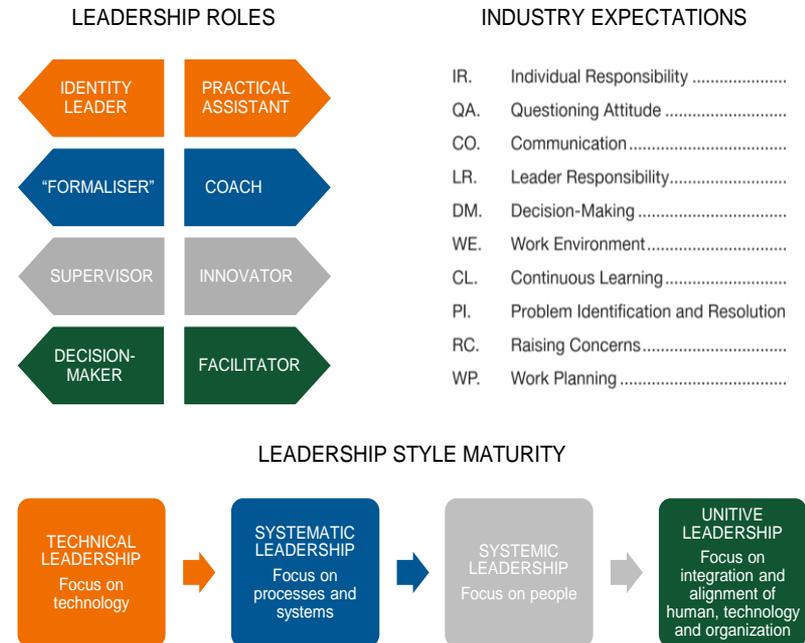
Framework for continuous improvement of safety culture

- Systematic modelling of how safety culture improvement activities are performed in Finnish nuclear power companies, focusing on the work of the **safety culture experts**
- Framework themes
 - What is the **history and motivation** behind the safety culture work?
 - How the companies **conceptualize** and understand safety culture?
 - For each element of the **PDCA framework**: What is done and how it is organized, with whom (organizational interactions), and what are the perceived good practices?
 - For each theme, a list of question items was developed (approx. 60 total at the moment)



Characterization of safety leadership activities

- Identify good **leadership practices** within a selection of managerial or supervisory contexts at nuclear power companies
- Contexts (case studies)
 - **ODM process** and the related meeting practices
 - **Management observation tours**
 - Safety leadership best practices of supervisors during **daily work**
- Three analysis approaches:
 - Expectations for nuclear safety leadership (IAEA Safety Culture Model)
 - Leadership styles based on systemic approach to safety
 - Leadership roles based on organizational tensions



Findings and lessons learned after first year of the project

- Framework for continuous improvement of safety culture provides a good reference for modelling safety culture work. It resulted in insights on topics such as:
 - What safety culture improvement activities are thought to be effective, for what purpose, and what were the preconditions underlying their effectiveness
 - The impact of organizational positioning of safety culture experts
 - Diversity of safety culture models used and the reasoning behind them
- The three leadership case studies are ongoing, but preliminary findings show that our approach has been able to identify
 - Leadership activities that work well (i.e., support the immediate task at hand, and facilitate safety culture)
 - Preconditions for their success

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