

Risk_OMT

Risk Modelling - Integration of Organisational, Human and Technical factors

Brief Presentation



Overview

- Purpose
- Risk OMT R&D programme
- RIF/PSF
- Dependencies
- Main emphasis in project

Objectives

- Ambitions for the Risk OMT programme:
 - Extension of the verification of performance of barriers
 - From existing technical focus into a focus where operational barriers have similar weight
 - Provide a sound quantitative basis for the analysis of risk reducing measures of operational nature
 - Learn how the best managed installations are achieving the advanced performance of operational barriers
 - Propose key performance indicators in order to enable the identification proactively when operational conditions are deviating severely from a high standard

Risk OMT programme

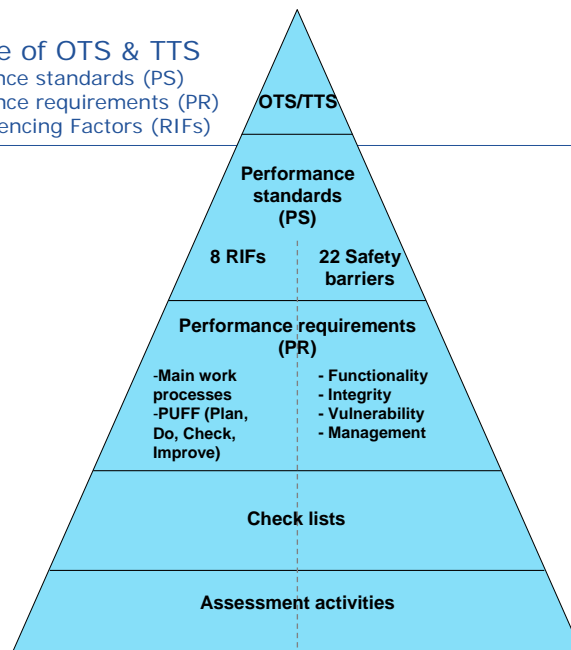
- Provide new knowledge and tools for major hazard risk management for offshore & onshore installations
 - based on improved understanding of the influence of organizational, human and technical factors
- Contribute to bridging the gap between the extensive knowledge about organizational and human factors in general, and the lack of knowledge about how to reduce the major hazard risk level due to operational causes

Ambitions

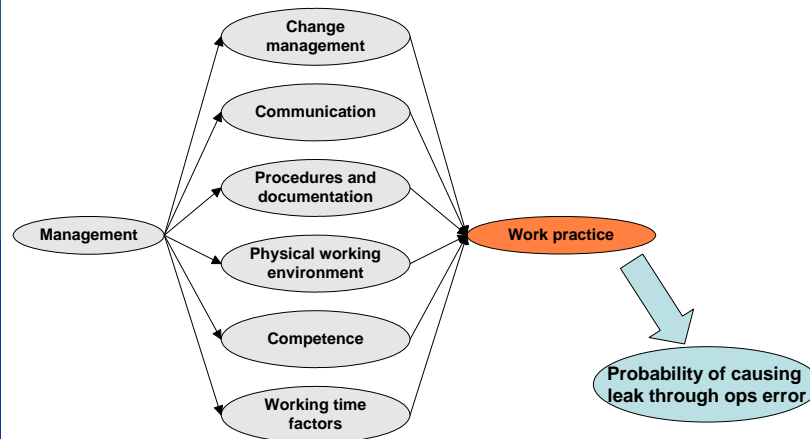
- Describe organizational and operational barriers for risk control
- Develop new knowledge about the effectiveness of barrier performance
- Define indicators and establish methods for how to measure the status
- Develop new models for barrier performance reflecting organizational and operational management factors
- Demonstrate use through case studies and proposed risk reduction measures
- Analyze experience data to identify effective risk management regimes

Structure of OTS & TTS

- Performance standards (PS)
- Performance requirements (PR)
- Risk Influencing Factors (RIFs)



Dependencies



Conclusions

- The main emphasis in the work will be on the following topics:
 - Development of operational risk models for well hazards and marine system failures
 - Improvement of the modelling of performance of operational barriers
 - Modelling of dependency between Risk Influencing Factors
 - Development of indicators that may illustrate when the likelihood of major accidents due to operational faults is increasing

Main challenges

- Quantification of operational barrier effectiveness
- Dependencies
- Execute empirical study in order to identify differences in risk management practices and their effects on the likelihood of making operational errors that may cause major accidents