

Managing Project Risks in the Oil and Gas Industry Training

# **Description**

## **Objectives**

- To develop key risk management competencies such as developing an appropriate risk process for an organisation in the oil & gas Industry
- To understand the key roles, responsibilities and activities associated with project risk management
- To understand how best to apply appropriate tools and techniques to optimise risk management for your projects
- To deal with the changing nature of risk through a stage gated project process
- To understand the human side of risk in terms of risk perception
- To understand the crucial challenges and lessons learned associated with oil and gas project risk management

#### **Programme Outline**

## **Fundamental Project Risk Management Concepts**

- · What is risk?
- What is different about project risk in the Oil and Gas Industry?
- The dual nature of risk: threats and opportunities
- Business, operational and project risk
- Introducing the risk management process
- Planning risk management

### Roles and Responsibilities and Identifying Risks

- Key risk management roles and responsibilities
- Good practices adopted in oil and gas organisations
- Alternative approaches which is right for your organisation?
- Risk identification
- Oil and Gas Industry specific techniques

- Overview of MAR, LOPA, HAZID HAZOP
- The 'Bow Tie' methodology
- Tools and techniques for project risk identification
- Alternative techniques based on team dynamic
- Sabotage teams
- Categorisation and the use of Risk Breakdown Structure (RBS)

#### **Risk Analysis techniques**

- Alternative Risk Analysis assessment formats and recommended practices in the oil and gas industry
- Qualitative /
- Semi-Quantitative
- Quantitative
- Assessing Impact
- Organisational / Business impact versus Safety / Environmental impact
- Tools and techniques for risk analysis
- Sensitivity Analysis
- Expected monetary value analysis
- Further factors to consider the people side of risk
- Perception, past experience and mental outlook
- External factors regulator activities & the effect of catastrophic incidents in the industry

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- Modelling and Monte Carlo simulation
- Risk Analysis outputs

# Planning Risk Responses and Implementing Risk Responses

- Risk prioritisation
- Risk response strategies
- Action plan formulation
- Action plan evaluation
- Analytical evaluation process
- Appropriate approval / endorsement of action plans
- Implementing and monitoring
- Variance and trend analysis
- Earned value management
- Implementing response plans good practices

### Reporting and Communicating Risk, Extracting Lessons & Lessons Learned from the Industry

- Risk reporting
- Escalating risks
- Reserve analysis
- Embedding the process
- · How to identify and feedback lessons learned
- Key risk management lessons from the oil and gas industry and megaprojects in particular
- Applying the lessons and how to implement in my organization