



Risk Assessment and Management in the Oil & Gas Supply Chain

Course Description

This course provides concepts, methodologies, workflows, and best practices to have a better understanding of the importance of Risk Assessment and Management in the Oil & Gas Supply Chain. Supply Chain is proven to be of an importance as one of the major operations in the Oil and Gas industry. It gets more and more vital for oil and gas companies to manage their supply chain activities in the most effective manner to reduce and guarantee efficient operations upstream and downstream of the oil and gas operations.

Early risk identification and management in supply chain play an important role to keep project on budget. Improving supply chain operations for the capital-intensive oil and gas industry requires specific considerations for trade-offs and risks.

The course covers the oil and gas supply chain elements, supply chain management in exploration and production activities, construction of production facilities, value of sourcing in oil and gas supply chains, purchasing and procurement management, as well as risk identification and management in Oil and Gas supply Chain.

At the end of the training the attendee will be able to identify best practices related to reduce risk related to the Oil & Gas Supply Chain activities.

Who Should Attend?

This course is designed for professionals with background in Engineering (Petroleum, Mechanical or Chemical), logistic or procurement.

1. Preferably, attendants should be familiar with procurement and supply chain activities.



What You Will Gain:

1. Learn the oil and gas supply chain fundamentals
2. Understand the concepts of purchasing and procurement management
3. Understand the importance of risk assessment in supply chain management
4. Learn how risk management can enhance the supply chain decision making process
5. Understand the supply chain risk management for material procurement in oil and gas industry

Training Methodology

The training course will combine lectures (30%) with workshop/work presentations (30%), interactive practical exercises and case studies (20%), supported by video material, software and general discussions (20%)

Course Content

Introduction to Oil and Gas Supply Chains Management

- Overview of Oil and Gas Supply Chains Management
- Upstream (exploration and production)
- Midstream (oil pipelines, gas pipelines, LNG, LPG, others)
- Downstream (petroleum refineries, petrochemicals, petroleum products)

Oil and gas supply chain fundamentals

- Oil & gas supply chain definition
- Difference between Supply Chain Management and Logistics Management
- Oil & gas supply chain conceptual model
- Oil & gas supply chain conceptual elements
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Engineering, procurement and construction (EPC) project life cycle.

Integrated supply chain management in the oil and gas industry

Value of sourcing in oil and gas supply chains

Analysis of sourcing and procurement practices

Purchasing and procurement management

Standardizing operational purchasing and procurement process



Evaluating and improving the effectiveness of purchasing and procurement process

Dynamics of procurement management

Procurement fraud prevention

Standard scheduling components and types

• **Scheduling modeling fundamentals**

Risk management framework in oil and gas supply chain

Material procurement risk management

Evaluation of supply chain risk management for material procurement in oil and gas industry

- Identification of Risk Sources
- Risk assessment
- Risk registry and risk matrix
- Risk mitigation plan
- Risk Management and Project Decision Making