MERCURY

Project Interface Management

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Introduction:

This course is designed to cover the fundamentals of interface management, tools, processes and systems that will guide you in the implementation, monitoring and control of interfaces in Oil and Gas projects.

This course is aimed at the engineer or technical manager who wants to apply best practice techniques to avoid delays, rework and other detrimental consequences of getting interfaces wrong. Whilst focused on human-engineered physical systems, the course has relevance to interfaces to software and humans.

Learning objectives:

- To be able to explain why there is a need for interface definition and management, and its impact on the integrity of the system solution.
- To be able to identify, define and control the system and system element interfaces, and apply and evaluate that knowledge using clear understanding.
- To be able to plan interface management, define processes and appropriate tools, and use these to monitor and control interface engineering activities.
- To be able to describe possible sources of complexity of the interface definition and management for a project, and provide examples; and to analyze the potential impact on the project using the Integration Readiness Level scale.
- To be able to identify consequences of changes to interfaces on the system elements, system of interest and/or containing system, and to understand how to manage those changes.

Targeted Groups:

- Interface engineers
- Design engineer
- Engineering manager
- Integration engineer
- Project manager
- Project coordinators
- Project engineer
- Software systems engineer

Course Outline:

Unit 1: Introduction: What is Interface Management

- What is Interface
- How does Interface Management reduce risk?
- Does your Project Need Interface Management?

Unit 2: Interface Management Benefits

- Interface Management & Stakeholder Benefits
- Contractors
- Owners
- Project Management Teams
- Mitigating Risk with Interface Management Key Performance Indicators KPIs
  - Change of Scope
  - Disconnection with Contractor
  - Schedule Discrepancies

Unit 3: Planning & Implementation

- Interface Management and the Project Life Cycle
  - Feasibility
  - Concept
  - Detailed Scope
  - Design
  - Construction
  - Commissioning and Start-up
  - Operations
- PreFEED/FEED
- Detailed Design
- Construction & Commissioning
- Project Closeout & Handover

Unit 4: Steps to Planning & Implementing IM

- Develop the Master Interface Plan
- Develop the interface register
- Select a tool that supports your plan
- Ensure communication & training

Unit 5: Interface Management Software

- Formalize scope delineation
- Mitigate cost and schedule risks
- Improve accountability
- Ensure policy compliance
- Reduce errors and wasted time reworking
- Why Managing Interfaces with Spreadsheets Is Risky?
- Why Managing Interfaces with the RFI process is Risky?
- Why Managing Interfaces with Document Management Systems Doesn't Work?