

# SIMOPS (Simultaneous Operations) for Onshore and Offshore Facilities

## INTRODUCTION

- “Simultaneous Operations” or SIMOPS often occur when multiple work activities and/or a large multi-disciplinary workforce is working at a single location and in close proximity, or whenever construction or major maintenance work is being done within a "live" process area of an existing facility. The risks associated with such simultaneous marine operations can be great and potentially dangerous. Therefore, all coordination of offshore operations must be addressed between the vessels and personnel involved for the safety of all personnel and assets. In such cases, it is critical that all relevant and involved parties come together in order to develop an appropriate hazard and risk management plan.
- The objective of this training course is to give the participants an overview of parallel activities at the same location and at the same time that are considered “simultaneous operations”. By learning to identify possible SIMOPS situations of the project early on in the project development phase, the course participants will be able to distinguish those possible situations which may cause costly delays, or worse, cause serious harm or injury to the construction workforce and offshore operations personnel.

This training course will feature:

- The methodologies that are used to identify, quantify, and evaluate the risks of SIMOPS
- The Scope, Application and Management Overview of SIMOPS
- The Respective Responsibilities and Accountability (RASCI)
- Hazards and Risks Identification and Management i.e. consequence assessment, frequency analysis, risk calculation and analysis
- The Initiation, Planning and Implementing SIMOPS
- Manual Of Permitted Operations (MOPO)
- Change Control or Management of Change (MoC)
- SIMOPS work permitry
- SIMOPS records and action tracking

## OBJECTIVES

By the end of this training course, participants will be able to:

- Understand what entails in SIMOPS and its methodologies
- Understand the Management overview of SIMOPS
- Understand the need for RASCI
- Understand the implication of Hazards and Risk Identification
- Fully understand the process for initiation, planning and implementing SIMOPS
- Understand Change Control or MoC in SIMOPS
- Understand SIMOPS Work permit system

## TRAINING METHODOLOGY

- This training course is conducted in a classroom. Examples and video clips of past SIMOPS for both onshore and offshore will be used to aid the learning and understanding of the subject matters. Participants will also take part in group classroom exercises to reinforce their learning experience. Each participant will receive a set of course materials. There will also be pre-course as well as post-course training assessment tests.

## WHO SHOULD ATTEND?

This training course is suitable to a wide range of professionals but will greatly benefit:

- Asset Managers
- Field Engineers, CSRs, Construction Supervisors, Project Engineers
- Operations Engineers
- Pipeline Discipline Engineers
- Various Discipline Engineers (structural, piping, equipment, electrical, instrumentation)
- Maintenance Engineers
- Contract Administrators, Buyers and Procurement Executives
- Cost Estimating, Project Control and Planning Engineers
- Managers and Executives who are new to Offshore Engineering Projects
- Other Engineers and technicians who need to update their current Oil and Gas industry experience and wanting to move to Offshore Field development Projects

## Course Outline

What is SIMOPS?

- Introduction to the SIMOPS Course
- Identify and Set the Expectations of the Course Participants
- Typical Offshore Activities which Occur Simultaneously
- Stakeholders – teams, departments, operations, projects, construction, maintenance

## Management of SIMOPS

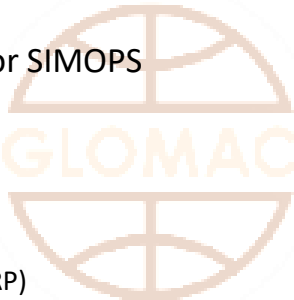
- Management Overview of SIMOPS (including the flowchart of 3 modes)
- Responsibilities and Process Flow (RASCI)
- The need for SIMOPS, Initiation and Planning
- Typical Hazards, Risks and Potential Consequences of Various Offshore Activities
- A Brief on Process and Technical Safety Management
- Hazards and Risks Identification (Risk Matrix)
- Management of Hazards and Risks, their Mitigation Measures
- Demonstration of ALARP

## Operations Requirements for SIMOPS

- A Brief on Permit-To-Work (PTW) System
- Authority for SIMOPS Approval
- SIMOPS Development
- Permitted Operations (including MoPO and Preconditions)

## Documentation Requirements for SIMOPS

- Initiating and Planning for SIMOPS
- Documentation and Requirement
- Bridging Documents – examples
- Site Specific Procedures (SSP)
- Emergency Response Procedure (ERP)
- Establishing the Permit System for SIMOPS (PtW and ISSoW)



## SIMOPS Execution and Management Review

- SIMOPS Roll-out and Execution
- Management of Change (MoC) in SIMOPS
- Management Review of SIMOPS
- Auditing SIMOPS