Subsea Awareness Course
27th - 31st October 2014
Parkroyal Kuala Lumpur Hotel
Jalan Sultan Ismail, 50250, Kuala Lumpur, Malaysia

This four and a half day Course has been designed to be suitable for contractors, engineers, operators and those new to the offshore industry, those transferring from other disciplines within the industry and those who have worked in subsea previously but would benefit from a refresher course and exposure to the latest technology. Whilst most of the course will be presented in a ‘classroom’ environment, the sessions will be interactive, with

**PROGRAMME**

Day 1: 09.00 – 16.45
General Introduction to the Subsea Sector
Presented by: Shell Malaysia

Overview
- Why subsea?
- What other options are available, including option evaluation and election?
- Examples of different systems used on existing fields
- What are the current design philosophies and the technology drivers?

Subsea Development Options
- Single well tieback, template, cluster/ manifold etc

Tea/Coffee

Components of Subsea Systems/Building Blocks’
- What is the purpose of each and how do they fit into the overall system?

Development Areas
- Deep water/ ultra deep water
- Complete subsea solutions

12.30 Lunch
13.30

Flow Assurance
Presented by: OneSubsea
- Understanding the nature of fluids, thermal management of subsea systems
- Oil and gas processing
- Deep- and ultra-deepwater development, seabed processing

17.00 Ice Breaker

Day 2: 09.00 – 16.45
Subsea Wellheads/Trees
Presented by: OneSubsea

Introduction:
- Getting to Know the Technology and Terminology
- Drilling vessels
- The basics of drilling a well
- An overview of key components and their methods of operation
- Xmas tree applications
- Completion risers

Tea/coffee

Wellhead Systems
- STC - 10 wellhead system overview
- STM - 15 wellhead installation animation

12.30 – 13.30 Lunch

Tree Systems
- HXT & VXT system overview
- HXT & VXT installation and tooling overview
- HXT installation animation
- VXT installation animation

Tea/coffee

Templates Manifolds and Connections

Connection Systems
16.45 Day end

Day 3: 09.00 – 16.45
Subsea Control Systems
Presented by: Aker Solutions

Introduction
- Overview, what does the control system do
- Types of Control System
- Advantages/disadvantages of each type

Tea/coffee

Typical Equipment
- Hydraulic pump unit, electrical power unit, master control station, subsea control modules

Subsea Options
- Hydraulics, electrics, umbilicals, sensors

Operator Interface
- Master control station, functionality and options

Controls Intervention:
- Future Technology drivers

12.30 – 13.30 Lunch

Subsea Control Fluids
Presented by: Castrol Offshore
- The control fluid as a component of the system
- Anatomy of a control fluid
- Environmental impact

Tea/coffee

Umbilicals
Presented by: Aker Solutions
- Design
- Manufacture
- Project Uses

16.45 Day end

Day 4: 09.00 - 16.45
Installation
Presented by: Technip Malaysia

Introduction: Field Architecture Overview
- Subsea tieback
- Subsea floating installation vessels
- Vessel Types Positioning, Structures
- Structure types, Foundation types, Foundation installation, Structure installation

Pipelines: Flexible
- Flexible Types, Critical success factors, Installation methods

Pipe Ins
- Rigid types, Critical success factors, Installation methods

12.30 - 13.30 Lunch

Remote Intervention
Presented by: Fugro Subsea Technologies Pte. Ltd.
- Introduction
- Safety, current environment, technology drivers, water depth

ROV Technology
- Introduction, system types
- Typical system components
- Operational systems & capabilities, launch & recovery systems

Tea/coffee

AUV Technology
- Introduction, system components, capabilities, sensors, trials & testing

Systems
- Tooling standards, interfacing, component replacement systems
- Connection systems, diverless pipeline repair

16.45 Day end

Day 5: 08.00 - 12.45
Depart Parkroyal Hotel for Site Visit to Aker Solutions facility at Port Klang

From drawing board to reality: you will see the high-tech equipment used to manufacture components for control of subsea wells & trees. You will also have the opportunity to view the hardware components used for subsea architecture.

12.45 Arrive back at Parkroyal Hotel

Course conclusion
Registration Information – Subsea Awareness Course - Kuala Lumpur

To register, please e-mail completed registration form to Joyce Bremner on J.Bremner@sut.org

Registration Fees
SUT Members MYR 7000.00 Non Member MYR 7500.00

Please note that all payments will be charged in British Pound Sterling, an exchange rate of 5.2MYR to £1 will be used

Included in the Fees: All refreshments during the Course, transport to and from Aker Solutions, a copy of the Course notes in handout format and USB memory stick containing PDF versions of the presentations.

Preferred Payment Methods:
Credit Card: Mastercard or Visa ONLY. We cannot accept payment by other cards.
Invoice: full details must be supplied ie. Po no. address to which the invoice should be sent.
Bank Transfer: (inclusive of transfer fees and currency exchange rates) Bank details will be provided on request.

Joining Instructions:
Joining instructions will be e-mailed to the registered delegate (as shown on the registration form). All details of presenters and updates to the programme will be included in the joining instructions.

Cancellations:
Refunds will be made on written cancellation received up to ten working days in advance of the event, but will be subject to a 15% handling charge. 50% will be deducted up to three working days in advance and 100% thereafter up to the start of the event. No refund will be given for non-attendance. Delegates may wish to nominate a substitute in their place.

Transport During the Course:
Delegates are responsible for their own travel arrangements to and from the Parkroyal Hotel Kuala Lumpur. Transport will be provided to and from Aker Solutions for the site visit on the Friday.

SUT reserves the right to amend/change the programme as it sees fit.

Registration Form

Please e-mail completed registration form to Joyce Bremner on J.Bremner@sut.org

SUT Member No. ________________ Please tick to indicate your preferred payment method:

Credit Card ________ (Visa or MasterCard) Invoice (PO No.) ________ Bank Transfer ________

Name of attendee ________________________________________________________________________________

Company ______________________________________________________________________________________

E-mail address ___________________________________________ Tel No. _____________________________

If paying by credit card, please provide the following information:

Credit Card No: VISA or MASTERCARD ONLY ________________/________________/______________/____________

Exp. _________ / _________ Security no _____________ (last 3 digits on the back of your card)

Name on the card _________________________________________________________________________________

Billing Address _________________________________________________________________________________

Amount to be charged ________________ Signature _________________________________________________

E-mail address where receipt should be sent __________________________________________________________________________

If you require an invoice please provide the following information:

PO No. should it be required ___________________________ Amount to be charged ____________________________

Company Name and address as it should be shown on invoice ________________________________________________

______________________________________________________________________________________________

E-mail address where soft copy invoice should be sent __________________________________________________________________________

(Kuala Lumpur Oct 2014 V1)