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# Subsea Pipelay Method Selection and Installation Sequencing Training Course

28 February – 4 March 2027
Abu Dhabi

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**Ref:** 2934_111500 **Date:** 28 February – 4 March 2027 **Location:** Abu Dhabi **Fees:** 6500 GBP

Subsea Pipelay Method Selection and Installation Sequencing is a 1-week training course for offshore installation and subsea construction engineers, who prepare a pipelay method selection and installation sequence during the course. Lay vessel days are among the costliest items of an offshore campaign, so the choice of lay method and the order of operations shape schedule, spread hire and weather exposure. Jupiter Prime Training runs this course on subsea pipelay method selection.

## Why Subsea Pipelay Method Selection and Installation Sequencing Matters Now

Two pressures shape the subject today. The fleet of capable lay vessels is limited, so contractors and operators compete for spread time and must justify a method early. Developments are also moving into deeper water and onto rigid and flexible tie-backs, which changes the tension, stinger and reel limits that decide feasibility. A poorly chosen method leads to standby, repeated abandonment and recovery, or damaged line pipe, while a sound sequence keeps vessel, tie-in and trenching crews moving in step. The course draws on recognised offshore installation practice, described in general terms.

## Who Gains Most from Subsea Pipelay Method Selection and Installation Sequencing

- Engineers who compare lay methods and vessels for a tender or concept study
- Engineers who check lay tension, stinger configuration and catenary limits
- Engineers who write initiation, laydown and abandonment and recovery procedures
- Engineers who plan tie-in spools, connections and post-lay trenching
- Engineers who coordinate weather windows and vessel interfaces offshore

A contractor bid group gains most when its marine and construction engineers attend together.

## Subsea Pipelay Method Selection and Installation Sequencing Capabilities

Participants practise matching line pipe, water depth and vessel capacity to a lay method, then ordering the campaign.

- Weigh stinger lay, vertical lay and reel lay against depth, pipe size and spread cost — method selection
- Specify vessel requirements for tensioner capacity, stinger length and deck storage — vessel chartering
- Calculate indicative lay tension and catenary shape for a given depth — feasibility sign-off
- Design an initiation and laydown arrangement with anchors or initiation piles — offshore construction supervisors
- Build an installation sequence linking lay, tie-in, trenching and testing — campaign schedulers
- Communicate weather window and contingency assumptions — operator representatives and marine warranty reviewers

## Key Subsea Pipelay Method Selection and Installation Sequencing Terms

- Stinger lay — a method in which pipe leaves the vessel near horizontal over a curved stinger.
- Vertical lay — a method in which pipe leaves a near-vertical tower, suited to deep water.
- Reel lay — a method in which pipe is spooled onto a reel onshore and straightened offshore.
- Tensioner — vessel equipment that grips the pipe and holds the tension.
- Catenary — the curved suspended span of pipe between the vessel and the touchdown point.
- Abandonment and recovery — lowering the pipe end to the seabed on a cable in bad weather and lifting it back later.

## Subsea Pipelay Method Selection and Installation Sequencing Day by Day

## Day 1: Campaign Context and Lay Method Families

- Stinger Lay, Vertical Lay and Reel Lay Compared — Method Shortlist
- Rigid and Flexible Line Characteristics — Suitability for Each Lay Method
- Water Depth and Pipe Size Envelopes — Method Feasibility Boundaries
- Spread Hire, Transit and Mobilisation — Campaign Cost Drivers
- Onshore Spool Base and Pipe Supply Logistics — Reel Lay Viability

## Day 2: Vessel Selection and Lay Equipment

- Tensioner Capacity and Grip Length — Vessel Shortlisting Criteria
- Stinger Radius and Roller Settings — Pipe Overbend Control
- Dynamic Positioning Versus Anchored Spreads — Congested Field Choices
- Deck Layout, Firing Line and Welding Stations — Lay Rate Estimates
- Vessel Motion Limits and Operability — Weather Downtime Assumptions

## Day 3: Lay Tension, Catenary and Touchdown Checks

- Catenary Shape and Top Tension Estimates — Lay Feasibility Screening
- Sagbend Curvature and Touchdown Point Monitoring — Pipe Damage Avoidance
- Lay Curve Tolerance and Route Bends — Residual Tension Requirements
- Flooded Pipe and Wet Buckle Contingency — Recovery Method Planning
- Field Joint Coating Cycle Time — Lay Rate and Schedule Impact

## Day 4: Initiation, Laydown, Tie-In and Trenching

- First-End Initiation With Anchors or Piles — Start-Up Arrangement Choice
- Laydown Heads and Final-End Laydown — Target Box Accuracy
- Abandonment and Recovery Procedures — Weather Window Contingency
- Tie-In Spools and Subsea Connectors — Metrology and Fit-Up Sequence
- Post-Lay Trenching, Ploughing and Jetting — Burial Timing Decisions

## Day 5: Practising the Pipelay Method Selection and Installation Sequence

- Case Method Shortlist — Applying Day 1 Feasibility Envelopes
- Case Vessel Comparison — Applying Day 2 Equipment Criteria
- Case Tension and Laydown Check — Applying Day 3 and Day 4 Methods
- Campaign Gantt and Interface Review — Vessel, Tie-In and Trenching Crews
- Pipelay Method Selection and Installation Sequence — Completed for Peer Challenge

## Applying Subsea Pipelay Method Selection and Installation Sequencing After the Course

- Lead a method screening session for a planned flowline against depth, pipe size and vessel availability.
- Review an existing installation schedule and add abandonment and recovery, tie-in metrology and trenching hold points.

## Subsea Pipelay Method Selection and Installation Sequencing Questions FAQ

### What is subsea pipelay method selection and installation sequencing, and why does it matter now?

Subsea pipelay method selection and installation sequencing is choosing how a line is laid and in what order the campaign runs. It matters now because capable lay vessels are scarce and deeper tie-backs narrow the feasible methods.

### Which roles gain most from subsea pipelay method selection and installation sequencing?

Offshore installation and subsea construction engineers gain most, especially those who prepare tenders or write lay procedures.

## How does subsea pipelay method selection and installation sequencing differ from a pipeline design course?

Subsea pipelay method selection and installation sequencing deals with vessels, lay equipment and the order of offshore operations. A design course sets line pipe and route; here those are inputs.

## What do you bring back from subsea pipelay method selection and installation sequencing?

You bring back a method shortlist, a vessel comparison, a tension and laydown check and a campaign sequence built on a case flowline.

## Subsea Pipelay Method Selection and Installation Sequencing: The Way Forward

The pipelay method selection and installation sequence is the reference that a bid or project team uses to secure the right vessel. Its first use is the vessel charter decision; marine, construction and scheduling engineers then build on it. After the first campaign, revisit the weather downtime and lay rate assumptions against what the vessel achieved.