

# Capability Statement

*Delivery Experience Across Offshore, Subsea, FPSO, LNG & Marine Infrastructure*

Global Synapse delivers complex offshore, subsea, FPSO, and LNG engineering programmes across FEED, detailed design, fabrication, and installation — spanning EPCI and consulting engagements across Singapore, the Middle East, Australia, South America, and South Asia. The experience below reflects capability delivered across the full asset lifecycle, from conceptual and Pre-FEED through to detailed engineering, construction support, and operations.

## FPSO & Topsides

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- Delivered fast-track detailed design and project management of topside modules for an FPSO project, coordinating multidisciplinary teams across distributed regions to meet tight schedules.
- Provided structural leadership within Project Management Teams (PMT) on major subsea projects, ensuring technical compliance with safety and engineering standards.
- Delivered FPSO topsides structural design activities, including conceptual sizing and weight estimation.
- Managed capture and pursuit of multimillion-dollar FPSO and upstream development projects.

## Subsea Systems & Pipeline Infrastructure

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- Delivered detailed design for deepwater PLETs (8– to 26-inch pipeline, horizontal and vertical connectors) for water depths up to 1,000m.
- Delivered detailed engineering for 24– to 48-inch subsea PLEM, valve skid, and trunkline supports in shallow water.
- Provided design lead for subsea structures on projects in Qatar and Thailand.
- Provided engineering support for deepwater subsea structures and mid-water buoy mooring and installation.
- Developed Integrity Management Plans for subsea PLEMs on gas lines and a desalination barge.
- Delivered design, fabrication, and installation support for dewatering manifolds, PLET handling frames, X-Tree wet parking mud mats, PLETs, spools, and installation aids for both shallow and deepwater scopes.
- Delivered design for a 120t spreader beam for lifting 300t spools, a 1,000t-capacity tri-plate for deepwater deployment, and an 800t sea-fastening structure for a deepwater lowering system.
- Executed a super-fast-track scope covering MDB, manifold, flexible, and umbilical installation, including repair of damaged umbilical and vessel-readiness support.
- Delivered design and installation engineering for mid-depth buoys, gravity structures, SPM buoys, FPSO mooring, and riser pull-in structures.

## LNG / FSRU Marine & Jetty Infrastructure

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- Served as Marine Lead on LNG facility FEED design for key marine structures, including MLA installation, module installation, blockworks, causeways, and flare supports; oversaw bathymetric and geophysical surveys, mooring/berthing analyses, and navigation simulations for QMax/QCMax vessels.
- Facility revamp Pre-FEED, with continued FEED/DE consulting support for vessels up to QFlex, including MLA installation constructability.
- Jetty Upgrade programme (MLA replacement, Fender Replacements, Jetty Strengthening) from Pre-FEED through EPCM.
- Conducted due diligence on an LNG jetty facility with FSU and ORF, including constructability review.
- Delivered conceptual and detailed design for jetty, dolphins, trestles, and process platforms for LNG/FSRU facilities with ORF.
- Provided Marine Lead support for jetty adequacy checks and strengthening for module offloading, passenger terminal conceptual design, and mooring assessments.
- Provided Marine Lead support on a Pre-FEED project in Singapore.

## Floating Solar & Offshore Wind

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- Delivered mooring concept design for floating PV panel systems in Singapore and Brunei.
- Supported multiple conceptual-stage consulting projects in offshore wind and floating solar.

## Offshore Structures & Jacket Engineering

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- Performed in-place and fatigue analysis as part of jacket structure reverification (CPP and WHP platforms up to 15,000t) for new loading conditions.
- Delivered jacket design for conceptual engineering and cost estimation.
- Led an offshore structures engineering and design department team.
- Delivered detailed design for an integrated utility and living quarters module with an estimated weight of 8,200T.
- Performed lifting, transportation, and load-out concept assessments to finalize primary steel MTOs.
- Delivered pipeline crossing support design, including steel structures and concrete sleepers.

## Installation, Fabrication & Marine Operations

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- Relocation engineering for a heavy lay system from Globally and crane barge lift planning and sea-fastening approval with Marine Warranty Surveyors (MWS).
- Managed a logistics base for operations-phase activities, including construction vessel clearance, supply/crew vessel management, and client and third-party interface.
- FSRU mooring and breasting dolphin infrastructure.
- Installation Aid, Grillage and Seafastening.

## Others

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- Offshore and marine structures bid estimation and technical review.
- Managed client relationships, constructability reviews, and risk assessments across project portfolios.
- Interfaced with clients, contractors, third-party vendors, and cross-discipline project teams on construction feasibility.
- PMC / Owners Engineer