Amplify Subsea Performance

subseaintegrationalliance.com

Subsea Integration Alliance

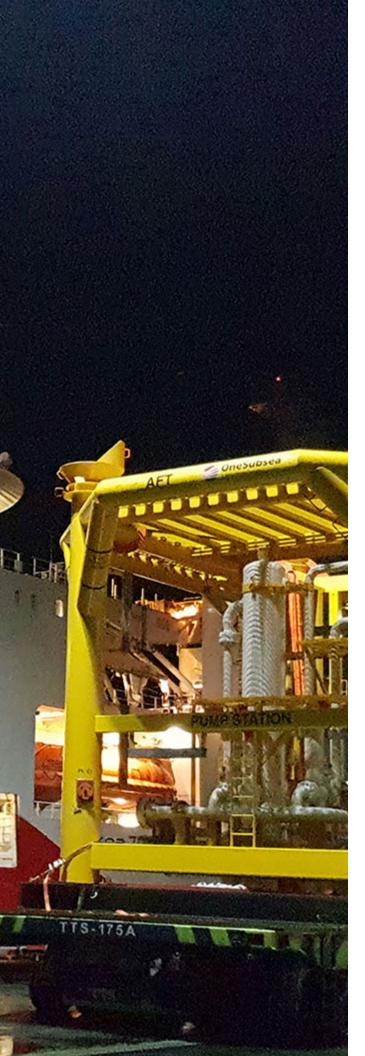
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Amplify subsea performance with Subsea Integration Alliance

Enabling subsea developments to efficiently deliver the greatest economic potential for the life of the field.





Meeting the challenges of subsea production to deliver long-term value goes beyond the capabilities offered by any individual service provider. Our response is Subsea Integration Alliance – an alliance like no other.

Introducing Subsea Integration Alliance

As Subsea Integration Alliance, we continuously enhance our individual capabilities, products and project delivery within subsea production systems (SPS) and subsea umbilical, riser and flowline (SURF) systems. Together, as Subsea Integration Alliance, we have further expanded our capabilities towards the integrated delivery of projects.

At the same time, we have significantly adapted our engagement models – allowing us to interact earlier with customers, and to support them in choosing the system, and product solutions that best match their project needs.

Subsea Integration Alliance brings these initiatives together into a fully integrated subsea offering.

Uncover the true value

Value delivery framework.

The value delivery framework reflects the key real-world drivers of our customers. The approach of Subsea Integration Alliance considers every aspect of it when developing solutions – keeping an open mind and a balanced view to unlock as much value as possible from each project.

Early collaborative, engagement utilising our subsea value framework, enhances investment returns across subsea projects.



Make it right. Make it smart. Make it happen.

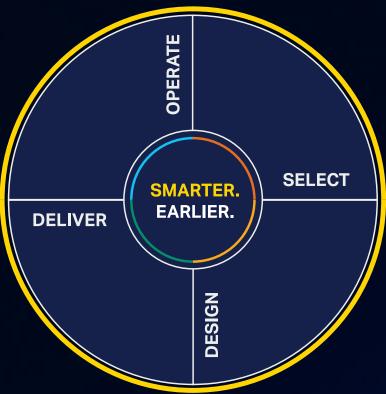
Secure the best options for the life of your asset

Subsea Integration Alliance develops value-focused customer solutions. We address the full field lifecycle from selection, concept evaluation and design, project delivery, to operational integrity management and field optimisation.

Smarter. Earlier.

End-to-end integration introduces an unprecedented level of efficiency to subsea projects by eliminating costly revisions, avoiding delays and reducing risks.

From day one, Subsea Integration Alliance adds value throughout the life of the field.





Select

Select the base case

We engage with our customers at the earliest stage of the asset's lifecycle to fully understand and address the key drivers, ensuring delivery of the optimum solution.

Using our digital collaboration platforms, we explore a full range of quantified scenarios with all the disciplines, and in real time to configure the best solution from the world's leading combined subsea portfolio.

Through early engagement, value is created for customers by lowering costs, streamlining schedules and unlocking new value. From the initial stages of project planning all the way to final investment decision, we solve economic challenges making sure the asset has the best possible opportunity to gain sanction.



Design

Optimise the system

Move beyond the selection stage and accelerate your subsea development process.

The approach of Subsea Integration Alliance creates the required system design by engaging the team that will ultimately deliver it. The robustness of the resulting FEED ensures minimal change and accurate forecasting.

A fully costed, scheduled and validated plan enables operators to gain sanction, and avoid surprises.

- Systems approach ensures delivery of requirements and an optimised solution
- Aligns manufacturing with planning
- Optimisation of interfaces between design, manufacture and installation
- Enables rationalisation, cost optimisation, design and process alignment, and standardisation considerations
- End-to-end engineering and execution
- Execution and delivery plans built on the right experience and know-how



Deliver

Deliver with certainty

Reduce the number of interfaces, lower costs, and streamline schedules.

Subsea Integration Alliance integrates and delivers all levels of execution – design, component testing, quality assurance, scheduling, logistics planning, risk management, fabrication, site testing, loadout, installation, and pre-commissioning – as one team.

We engineer, procure, construct, install and commission capital-efficient subsea solutions. The Subsea Integration Alliance approach optimises phase development and increases delivery and deployment assurance.

- Combined project delivery teams
- Integrated engineering
- Combined schedules and sequencing
- Integrated supply chain
- Optimised local content
- Connected facilities, yards, and bases
- Experience and know-how



Operate

Optimise field performance

Maximise the performance of your asset with leading life of field solutions to enhance production management and asset integrity outcomes.

The portfolio of solutions from Subsea Integration Alliance includes monitoring platforms, inspection systems, remote intervention and repair systems, as well as fluid intervention systems. These offerings help monitor and control subsea production and processing, assure flow, and maintain long term throughput. Industry-leading life of field and aftermarket solutions maintain asset integrity at optimum levels.

- Digitally enabled platforms
- Connected subsea systems
- Life of field service and support
- Efficient operations

Integrated Field Development planning

Early engagement to enable, accelerate, and enhance subsea production.

The Integrated Field Development service (IFD) maximises asset value by dynamically connecting reservoir, production and economic models with well, subsea infrastructure, and topside facilities in a single, collaborative environment.

This connected approach allows us to develop the asset based on reservoir and hardware considerations for the life of the field. Taking a full system view enables Subsea Integration Alliance to drive out cost and balance investment against recovery, to identify the precise point where dollar per barrel is minimised.

Solutions that best meet your project requirements financially, technically, practically and logistically.

Subsea Integration Alliance tools and methodologies allow us to combine various disciplines and the full range of subsea technologies in one collaborative platform – seamlessly unifying planning and execution.

- Integrated asset modelling connects reservoir and production system decisions
- Subsea Planner* collaborative field development planning solution creates costed 3D layout designs with dynamic reservoir and production models that change as the field matures
- Project definition and execution system to quickly build a clear picture of exactly what is needed for the study project, how to manage it as well as the cost and time required



*Mark of Schlumberger



Leading subsea technology portfolio

Subsea Integration Alliance has one of the broadest portfolios in subsea, comprising market-leading technologies. Working as an alliance allows us to standardise and optimise systems across the technology portfolio.



Powered Production Systems

Relying solely on reservoir drive means that pressure, productivity and recovery all decline at a faster rate than necessary.

Designed and engineered for the unique challenges posed by specific subsea applications, OneSubsea powered production systems help you achieve full asset potential. At the core of powered production systems is OneSubsea's industry-leading single-phase boosting pump, multiphase boosting pump, and multiphase compressor. From the heavy oil fields of the Republic of Congo to the uncompromising Australian brownfields, we deliver significant investment returns and operational improvement on a global stage.

Subsea Production Systems

OneSubsea provides fully integrated subsea production systems, incorporating field-proven technology and products.

Decades of experience and engineering innovation have helped to ensure that our product range – from wellheads and trees, to manifolds and flowline connectors, to production controls and workover systems – drives technically superior field development solutions. From deepwater to ultradeep water, from greenfield to brownfield, OneSubsea delivers the right solution for any challenge.

Standard configurable systems.

OneSubsea delivers capital-efficient, pre-engineered standard configurable systems. Each system is fully qualified and adequately documented to provide customers with the details to align with our technical specifications. Project tenders are streamlined and OneSubsea is able to engineer, manufacture, and deliver system solutions globally as soon as 12 months after contract award. Our standard configurable systems include subsea trees, manifolds, controls, connection systems, and wellheads.



Trees

OneSubsea vertical and horizontal trees are built and installed with proven technology based on extensive subsea experience and years of testing, under some of the most demanding conditions. Our trees provide reliable operations in all environments, from shallow to ultra- deepwater. The monitoring and feedback capabilities of OneSubsea trees reduce operator risk and provide data and communication for operations management.



Manifolds

OneSubsea manifolds are designed and developed based on more than four decades of applied subsea experience. With a variety of manifold types installed in water depths up to 10,000 ft, pressures up to 15,000 psi, and temperatures up to 350 degF [177 degC], our manifolds are available in all material, pressure, and temperature classes.



Controls

Since 1999, OneSubsea has designed and delivered more than 1,000 subsea control modules to more than 50 projects worldwide. Our control systems use field-proven, robust, and reliable technology, providing the versatility and flexibility that your project requires to achieve maximum efficiency and reduce OPEX through minimised interventions and significantly reduced deferred production. Working together enables Subsea Integration Alliance to standardise across our technology portfolios to create smarter subsea system solutions.



Flowline Systems

High performance and cost-efficient Flowline Systems to enable optimal field architecture.

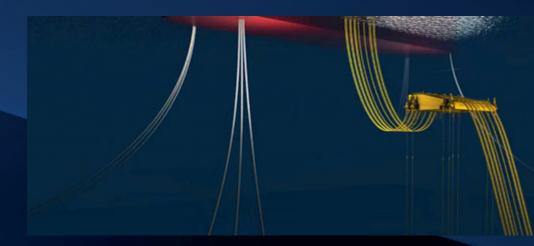
The Subsea 7 flowline portfolio encompasses the full range of cross section and material solutions, from simple corrosion coated flowlines, to wet insulation, Pipe-in-Pipe, active heated systems, and internal PE coated systems. Our Electrically Heat Traced Flowline pipe technology advances help manage flow assurance, to overcome the challenges of longer distance tiebacks and greater water depths, cost-effectively.



Pipeline Bundles

Subsea 7's track record includes the successful design, fabrication and installation of over 80 pipeline bundles around the world.

The Pipeline Bundle neatly incorporates all structures, valve work, pipelines and control systems necessary to operate a field in one single product, delivering considerable value and potential cost savings for a wide range of applications, including HPHT field developments.



Riser Systems

By taking into account field characteristics such as water depth and environmental conditions, our riser systems meet the ever-increasing challenges of deepwater and harsh environments.

Subsea 7's riser portfolio includes decoupled riser systems such as the Single Hybrid Riser, the Hybrid Riser Tower and the Buoyancy-Supported Riser – successfully proven in major deepwater projects. Coupled riser systems include Flexibles, Steel Catenary Risers and Steel Lazy-Wave Risers, including the first SLWR system deployment on Brazil's BC-10 project.



Integrated Project Delivery

Bringing together the big event.

Subsea Integration Alliance combines the strengths of Subsea 7 and OneSubsea, Schlumberger with strong global project delivery capabilities and an outstanding track record.

- EPCI project management capability
- Fully integrated teams, clear single-point accountability and established governance models
- Global Projects Centre organisation with the processes, systems, capabilities and a track record for large, complex project execution
- Local presence and commitment to local value creation
- Fit-for-purpose systems and processes within SURF, SPS and Integrated Project Delivery

Integrated Project Delivery balances integrated project management with control. We make sure our processes and working methods remain customised and fit-forpurpose for each task, based on lessons learnt over the years.

Our fully integrated project teams provide customers with end-to-end safety and quality leadership. We proactively consider personnel safety, environmental impact, and our social responsibilities.

Our re-engineered organisational and delivery models centre around collaboration, transparency and customer focus for greater efficiency and lower costs. Customers experience more robust and predictable project execution through the integrated management of risk, schedule and interfaces.

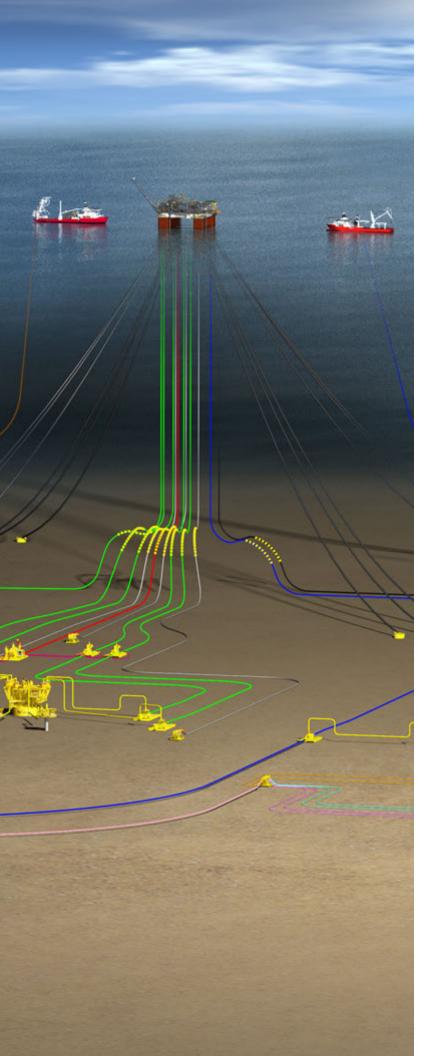
Utilising leading technology, our modern fleet and extensive manufacturing capacity, Subsea Integration Alliance teams provide customers with the safest, most efficient and cost-effective solutions for their unique field development needs.

Total lifecycle solutions

Improving productivity, maintaining availability.

To maximise lifelong value we provide customers with solutions that optimise the overall performance and returns from their assets. Our total lifecycle approach begins with early engagement to ensure optimal economic performance and is delivered through our project execution and technology portfolio and supported throughout the life of field by leading aftermarket capabilities.

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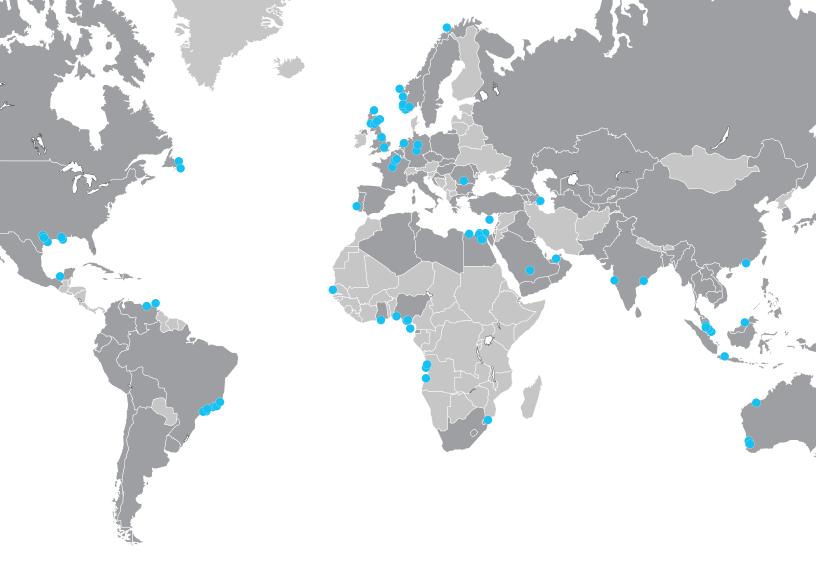
Our combined capabilities allow customers to maximise recovery rates, achieve the highest levels of uptime and availability, and maintain asset health in the most efficient manner.

Improving productivity

- Monitoring and control
- Analytics and insight
- Connected systems
- Future-ready solutions

Maintaining availability

- Operational systems
- Asset integrity and monitoring services
- Inspection systems
- Autonomous vehicles
- Remote intervention and repair systems
- Fluid intervention systems
- Digitalisation monitoring and optimisation



Global network

Subsea Integration Alliance has the resources and capabilities to assure delivery of subsea projects of any scale, anywhere in the world.

We maintain operational facilities worldwide to support the asset management needs of our global customer base. Each facility is tailored to the asset management requirements of the region it serves.

Our global operations include an extensive infrastructure of pipeline spoolbases, fabrication and operations support yards. These strategically positioned assets, in conjunction with a network of local partners, are central to developing strong and sustainable local businesses.





A diverse fleet and strategicallypositioned global assets

Subsea 7 has one of the most capable and versatile vessel fleets, including chartered and high-specification owned vessels. Balancing operational flexibility while retaining full control of the capabilities makes our services unique.

With offshore operations managed, crewed and operated by highlyexperienced marine and construction personnel, we respond quickly and sensitively to customer demands; leveraging the full strength of our global resources and know-how.

Get there first with Subsea Integration Alliance

Murphy sets length and efficiency records with integrated EPCIC solution

Longest deepwater multiphase boosting tieback and the shortest implementation time

Murphy set records for the longest deepwater subsea multiphase boosting tieback at 22 miles as well as achieving the shortest implementation time for subsea boosting from concept to start-up.

BP initiates industry-first large-scale integrated subsea project

Holistic approach improves risk management and reduces costs in deepwater GOM

With all aspects of the technical solution integrated for full efficiency, Subsea Integration Alliance is helping BP reduce costs, increase execution predictability, and improve technical and delivery risk mitigation through enhanced interface management.

TAQA achieves record-breaking 18-mile tieback in UK North Sea integrated solution including using subsea delivery of multiphase pump as alternative to electric submersible pumps

Coupled with the long-distance tieback, the subsea boosting technology provided production security for the late-life asset, enabling TAQA to finish production on the Eider platform on schedule and keep Otter in production. Subsea Integration Alliance is a strategic global alliance between Subsea 7 and OneSubsea® the subsea technologies, production and processing systems division of Schlumberger, bringing together field development planning, project delivery and total lifecycle solutions under an extensive technology and services portfolio.

As one team, we amplify subsea performance by helping customers to define, select, install and operate the smartest subsea projects, that eliminate costly revisions, delays and reduces risk across the life of field.

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