

# Commercial Collaboration Case Studies: Bruce Field

## Background

- BP and Baker Hughes, a GE Company (BHGE) developed an innovative commercial framework for delivering a well stimulation programme for the Bruce Field.

## Collaborative behaviours (tick all that apply)

Reasonable  Aligned  Strategic  Learning  Change  Respect  Accommodating  Openness

## Description – how were collaborative behaviours exhibited?

BP and BHGE worked so that the needs of both were **ALIGNED**. BHGE funded the upfront costs by using existing equipment to design, plan and execute the well stimulation programme. In return BHGE receives payback of their costs and a success-based margin based on the volume of incremental production achieved.

**LEARNING.** BP is looking to apply this model across other projects in the North Sea and plans to continue collaborative working with the supply chain to maximise recovery from its assets.

## Outcomes – impact of collaboration

The Bruce well stimulation project was delivered two years earlier than planned with potential to increase production by up to 40%. The collaborative solution can be deployed to increase production from other fields in the North Sea.

# Commercial Collaboration Case Studies: ETAP Area

## Background

- BP, Shell, Esso, JX Nippon, and Zennor have renegotiated a number of key commercial agreements to improve alignment across all parties and create a framework to stimulate investment in the ETAP area.

## Collaborative behaviours (tick all that apply)

Reasonable  Aligned  Strategic  Learning  Change  Respect  Accommodating  Openness

## Description – how were collaborative behaviours exhibited?

ETAP owners recognised that to create a sustainable commercial framework to underpin investment decisions, there would have to be a significant CHANGE in how the platform's annual costs of ~£100MM were shared between the fields. The materiality of the changes required strong support from the senior leadership in all of the companies involved.

The parties ALIGNED ownership interests, decision making and cost sharing mechanisms, removing the commercial barriers that threatened investment in both life extension and increased value recovery activities.

## Outcomes – impact of collaboration

The ETAP owners can now plan future work programme and budgets with a focus on investing for the long term future of ETAP e.g. the £215MM facility renewal activity.

# Commercial Collaboration Case Studies: Southern Wye Project

## Background

- ConocoPhillips, Repsol Sinopec, Maersk, Ithaca and JV partners in conjunction with their supply chain partners successfully completed a fast track and complex subsea project for the simultaneous disconnection of the Janice Field and tie-in of the Stella field to the Southern Wye / Norpipe system.

## Collaborative behaviours (tick all that apply)

Reasonable  Aligned  Strategic  Learning  Change  Respect  Accommodating  Openness

## Description – how were collaborative behaviours exhibited?

By using ACCOMMODATING commercial behaviours, all parties were able to overcome commercial, legal and logistical challenges. Collective value was maximised over individual positions whilst production risks to existing Southern Wye Users were mitigated.

OPENNESS. Particularly close co-operation and commitment to speed of response was required to complete the project within the 3-yearly Norpipe turnaround.

LEARNING. The regional approach to problem solving adopted during the Southern Wye Project is transferrable across the industry.

## Outcomes – impact of collaboration

Time was critical - the complex project was completed within the fixed and very short schedule of the 3-yearly Norpipe turnaround.

# Commercial Collaboration Case Studies: Northern North Sea Operational Gas Group

## Background

- TAQA, CNR, EnQuest, Dana Petroleum, Fairfield Energy, BP, Shell, Esso formed the Northern North Sea Operational Gas Group to share fuel gas and overcome a shortage in some areas of the North North Sea.

## Collaborative behaviours (tick all that apply)

Reasonable  Aligned  Strategic  Learning  Change  Respect  Accommodating  Openness X

## Description – how were collaborative behaviours exhibited?

STRATEGIC. The companies involved in the Northern North Sea Operational Gas Group looked beyond their own operations to see the bigger picture.

OPENNESS. Regional analysis highlighted the opportunity to share fuel gas and overcome a shortage in some areas of the Northern North Sea. The companies formed the Operational Gas Group, combining joint requirements to create scale and agree new commercial terms with suppliers.

## Outcomes – impact of collaboration

This example highlights the commercial and operational benefits of companies working together to achieve a common goal; and establishes a positive precedent for others to follow.

# Collaborative Behaviours Case Study: Maria Project

## Background

- Period: e.g. Q2 2016- Q3 2017

Wintershall required a full workover system for the Maria project and approached Expro's subsea team for the solution. The team supplied an Expro Landing String Assembly (ELSA) and associated equipment for seven horizontal Xmas tree runs, seven completion installations, and five wells cleaned/flowed back.

## Critical behaviours (tick all that apply)

Reasonable  Aligned  Strategic  Learning  Change  Respect  Accommodating  Openness

## Description – how were critical behaviours exhibited?

Expro and Wintershall's "one team approach" ensured the highest standards of safety, quality and personalised customer service. Early engagement with Wintershall, and subsequent third parties, resulted in a fully integrated project team with the goal of delivering the project within budget, without compromising safety and performance. Early alignment, a flexible approach and increased levels of communication helped the project team to identify solutions that were cost effective and efficient.

This integrated approach allowed Expro to become the single vendor interface for the Maria project. Thanks to the excellent project management and communications skills displayed, the partnership contributed to the project being delivered 20% under budget.

## Outcomes – impact of collaboration

This project was an excellent example of early engagement and continual customer interface through an open and honest working relationship. Collaboration with a trusted partner allowed for a solutions driven approach, resulting in first oil being delivered one year ahead of schedule.

# Collaborative Behaviours Case Study: Quad 204 landing string

## Background

- Collaboration between Expro and BP to deliver a bespoke landing string for the Quad 204 development. The scope of the project was technically challenging due to the rig BOP configuration/orientation, as well as the unique completion/installation methods and the bespoke SPS interface.

## Critical behaviours (tick all that apply)

Reasonable    Aligned    Strategic    Learning    Change    Respect    Accommodating    Openness

## Description – how were critical behaviours exhibited?

Thanks to the long-standing relationship and successful track record with BP, Expro's subsea team were able to use valuable information from previous projects to ensure complete compliance with the customer's project expectations. Expro had both familiarity and a clear understanding of BP's needs and end goal. A dedicated Expro technical team were present throughout the project to enhance communication lines, resulting in more responsive feedback to both teams.

Both partners embodied a culture of openness and honesty, which had a significant impact on accelerating the project delivery timeline. During execution, both teams were fully integrated to embed the "one team" approach philosophy. This created a collaborative atmosphere and adaptive culture, making the team more flexible and improving the synergy between Expro and BP.

## Outcomes – impact of collaboration

Adopting the collaborative behaviours set out above, the project team were able to make efficiency gains through a proactive early engagement strategy, which resulted in cost and time savings. Early alignment, respect, and a flexible attitude helped the project team to identify solutions that improved efficiency and safety, enabling an accelerated timeline. With both teams experiencing increased levels of contact, customer service was enhanced and allowed for the adoption of a solutions driven approach.

# Collaborative Behaviours Case Study template: Production Efficiency Task Force

## Background

Between 2004-2010 Production Efficiency (PE) on the UKCS fell from 80% to 60%, contributing towards a decline in UKCS production from 3.6 to 1.6 million boepd. Following this, industry was tasked with returning PE to 80%, with the Production Efficiency Task Force (PETF) being formed to facilitate industry's response to this challenge. The PETF is led by a steering group, with cross-industry workgroups focused on addressing the largest production loss drivers across the basin.

## Critical behaviours (tick all that apply)

Reasonable  Aligned  Strategic  Learning  Change  Respect  Accommodating  Openness

## Description – how were critical behaviours exhibited?

The success of the PETF is a result of the level of cross-industry collaboration, sharing and learning that has been realised. Active participation has been seen across most UKCS operators and a wide range of contractors and service providers.

Companies have been open about sharing their challenges within the workgroups and have benefitted from discussing these issues with their peers.

There has also been significant collaboration to develop industry good practice in the shape of guidelines. These have been produced covering the 'Efficient Execution of Planned Maintenance Shutdowns' (TARs) and to 'Maximise the Efficiency of Compression Systems'. There is also a workgroup which is now focused on developing outputs which will reduce the level of production losses associated with export infrastructure. The new Terminals and Pipelines workgroup are also hosting sharing and learning events, with the first having taken place at the CATS Management Teesside Gas Plant. The PETF are also now looking at how it can support the deployment of new technology to improve performance, uptime and reliability.

## Outcomes – impact of collaboration

Since the formation of the PETF, PE on the UKCS has increased from 60% to 74%. This improved performance has resulted in a significant increase in UKCS production, with the 1 percentage point improvement in 2017 alone accounting for 12 million boe.

The group are continuing their focus on driving further improvements, with the aim of returning PE to at least 80%.

# Collaboration Case Studies: Buzzard Phase II Project

## Background

- Buzzard owners and supply chain partners have recently received full sanction to move ahead with the Buzzard Phase II project (BP2).
- BP2 is a subsea development of the Buzzard northern area with first oil scheduled towards end 4Q 2020.
- The objective of BP2 is to safely develop additional reserves, supporting the MER UK goal of recovering the maximum value of economically recoverable petroleum.

## Critical behaviours (tick all that apply)

Reasonable  Aligned  Strategic  Learning  Change  Respect  Accommodating  Openness

## Description – how were critical behaviours exhibited?

CHANGE. BP2 is using an integrated and fully co-located project team comprised of Nexen (operator) and supply chain partners AGR Well Management, Baker Hughes, a GE company (BHGE), COSL Drilling Europe, Subsea 7 and Warley Parsons Services. Key project management roles are filled by the supply chain providing direct contract/contract interface management. The project team scope is also much wider than traditional projects and includes all aspects from drilling, subsea and topsides facilities work.

ALIGNED. The team is working together based on an incentivised, outcome-based commercial model supported by specific KPI's. This enables transferring/sharing of risk and reward with the supply chain.

OPENNESS. ECITB Collaboration toolkit and behavioural KPI's are used to facilitate a collaborative approach.

STRATEGIC. Significant investment in the local UK supply chain, supporting jobs and future skills across a number of UK locations.

## Outcomes – impact of collaboration

By working collaboratively the BP2 owners and supply chain partners are best positioned to achieve reduced costs through project execution efficiencies, share rewards and achieve early delivery compared to conventional contracting strategies.



# Collaborative Behaviours Case Study: Brent Bravo Lift Preparations

## Background

Shell and contractors Wood Group and Stork formed a cohesive team, adopting the ECITB Project Collaboration Toolkit, to deliver the Brent Bravo (Lift Preparations) Decommissioning Project and achieve significant improvements in cost and productivity.

## Critical behaviours (tick all that apply)

Reasonable  Aligned  Strategic  Learning  Change  Respect  Accommodating  Openness

## Description – how were critical behaviours exhibited?

In 2017 the Brent Delta topside was successfully lifted and removed after years of preparations. The work was executed using distinct Client and Contractor teams, with traditional project plan, control and execution techniques.

When planning for Brent Bravo lift preparation activities, Shell moved away from this approach, targeting an integrated collaborative project team to seek efficiencies and enable a more innovative approach. This started with contractor selection for which the ability to collaborate was counted as a higher priority than cost in partner selection. The Project Collaboration Toolkit was also adopted and followed through the project.

Right from project set up, the partners developed a behavioural charter based on blame free culture and trust, which was used to measure progress. The partners also aligned up front on a reduced, set of simplified KPIs. During execution the team followed the axiom of 'one team, one project, one source of the truth'. This created a collaborative atmosphere but also avoided duplication of effort. To further increase efficiency the team adopted standard industry practices wherever fit for purpose. The flexible schedule and willingness to take on new ideas made the team more agile, and led to faster and lower cost delivery.

## Outcomes – impact of collaboration

Through the collaborative behaviours set out above, the project team size was reduced by 20% and significant improvements were achieved in productivity. Early alignment, respect, and a flexible attitude to change helped the project to deliver within a very tight 11 month period and the base workscope significantly under budget. Along with learning the lessons from Delta, it led to a reduction in like for like removal preparation costs vs Brent Delta of ~70%.

# Collaborative Behaviours Case Study: Penguins Redevelopment

## Background

- Period: 2015 - 2018
- **Headline description:** The Penguins project (redevelopment of an oil and gas field in the UK Northern North Sea with expected recovery of up to 80m boe) was quick to grasp the need for strong industry collaboration in response to the oil price downturn. This collaboration has enabled innovative thinking, willingness to challenge established processes and the flexibility to change. It has resulted in lower development cost and the realisation (FID early 2018) of an initially sub-economic project.
- **Companies/Organisations involved:** Shell (Subsea, subsurface, FPSO, C&P, Wells, Trading), Sevan, CGG, several vendors, OGA

## Critical behaviours (tick all that apply)

Reasonable  Aligned  Strategic  Learning  Change  Respect  Accommodating  Openness

## Description – how were critical behaviours exhibited?

**Learning:** Having experts from Sevan, Shell Trading, UK Operations and Offshore Structures in the design team, was invaluable. This collaboration ensured that industry lateral learning and best practice was built into the design of the redevelopment.

**Strategic:** The project is making a positive contribution to MER by unlocking new opportunities in a mature field. The stranded Tybalt discovery will now contribute additional volume for the project. Re-use of existing pipeline enabled the FPSO to be repositioned to a more central field location, maximising the re-use of existing infrastructure and minimising tie-back lengths.

**Change:** The project has been engaging with key suppliers since the start of FEED in 2015. The subsea scope has gone through several stages of development, in large part due to engagements with the contractor community. As a result of discussions on the objectives of the project and opportunities for optimization, the project revised our strategy to include an EPIC contract for the main subsea system, and developed a functional specification, replacing many of our specific technical requirements with industry standards. This will enable contractors to offer more competitive solutions.

**Accommodating:** Vendors were given the opportunity to tailor the scope and minimise cost to suit their own execution capability, fabrication facilities and vessels in a design competition

## Outcomes – impact of collaboration

Competitive scoping, early contractor involvement and the use of a standard design helped the team to get the optimum solution with 50% cost saving and 25% volume additions realised when compared to the initial phases of the project. Collaboration in the project also led to innovative approaches (e.g. vendors were given the opportunity to tailor the scope, competitively acquiring seismic data, designing slim wells) and use of new technologies.