

EC
ITB*

**CNOOC Buzzard
Phase II Major Field
Expansion Project
CASE STUDY**



BPII Alliance delivering value through collaboration

CNOOC International engaged with the supply chain, creating an 'Alliance' to deliver the Buzzard Phase II (BPII) project. CNOOC and its partners, together with its Alliance members: AGR, Baker Hughes/GE, COSL, Subsea 7 and Worley, created an integrated, collaborative and outcome-focused approach to delivering the project.

The BPII project initially targeted the safe and efficient delivery of first oil in 2020. However, schedule commitments made when the project was sanctioned could no longer be met due to the COVID-19 pandemic. In addition, BPII's final hook up activities were aligned to the Forties Pipeline System (FPS) shutdown which had been deferred into 2021. Proactive management of these external circumstances enabled the Alliance to develop a revised schedule, targeting first oil in Q4 2021.

Committed to meeting the revised project schedule, the Alliance worked collaboratively to minimise the impact of delays and additional costs associated with the pandemic.

First oil was successfully achieved in November 2021.

The project and Buzzard asset teams executed the project without contributing to a single lost/deferred barrel of Buzzard production and delivered the project within its original sanctioned cost estimate.

The ECITB's collaboration toolkit was used early in the project to assist and measure the collaborative setup of the project and benchmark the Alliance's culture and behaviours throughout the project. There was a particular emphasis on early project workshop, team connections, creation of a project charter and focusing on establishing a shared outcome-focused vision by the Alliance parties.

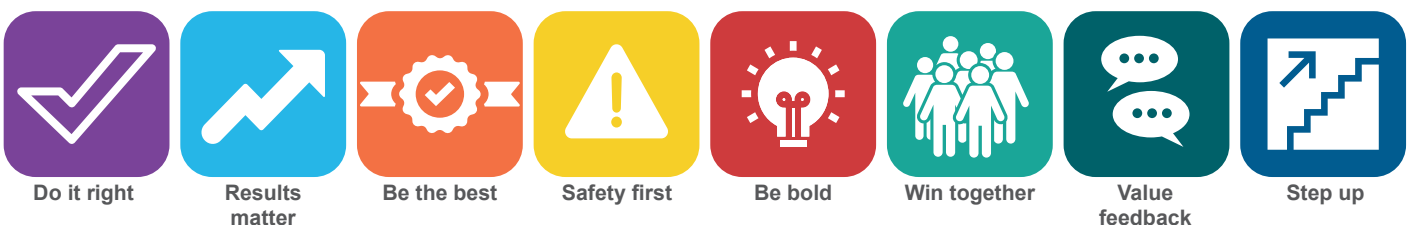
The integrated project team worked collaboratively to deliver the pre-determined outcome-focused goals. A high level of integration, trust, collaboration and effective outcome-focused incentivisation has reduced risk and driven value throughout the project.

All Alliance members committed to a common Project Charter with the aims of:

- Cultivating a 'win together' & collaborative environment
- Embracing challenges collectively as 'one team'
- Demonstrating effective and collaborative decision making
- Making the project and the alliance a success

CNOOC International is the operating partner of Buzzard (43.21%), with Suncor Energy (29.89%), Harbour Energy (21.73%) and ONE-Dyas (5.16%) also holding interests in the field and its facilities.

ECITB Project Collaboration Toolkit - Pilot Project



Project Tenets

Key project collaboration success contributors

Collaboration is the best way to deliver project objectives

We will trust in each other from the onset

Client led, Alliance delivered

PCT Phase 1	PCT Phase 2	PCT Phase 3	PCT Phase 4
Establish Environment	Set up	Execute	Close out
<p>PCT1.2 - Collaborative capability assessment as part of alternative contracting process</p> <p>PCT1.4 -Project Lead Entity established</p> <p>foundation of trust - every Alliance member starting with a full 'bank account'</p> <p>PCT 1.6 -An innovative process for Alliance selection including commercial competition and technical merit</p> <p>PCT 1.7 - A truly unique alliance model of risk / benefit sharing</p>	<p>PCT2.1 - Genuinely integrated alliance team working. Each role within the delivery alliance team selected on the basis of 'the best athlete' irrespective of employing entity and rank.</p> <p>PCT 2.2 - Common project delivery objectives continuously communicated in alliance partner organisations</p> <p>PCT 2.3 - Delivery Alliance project team co-located in Project Lead Entity office supporting one-team working and collective project issue and problem solving</p>	<p>PCT 3.1 (& 2.9) - 'One Team' approach to project management and controls with 'best process' selected from delivery alliance parties</p> <p>PCT 3.2 - KPI measurement, and ongoing commercial status of each delivery alliance partner regularly communicated and visible</p> <p>PCT 3.3 and 3.4 - Single team approach to SSHEQ management for the project with exceptional results</p>	<p>PCT 4.1,4.3, 4.4 & 4.5 - Lessons learned process used throughout project delivery. All parties keen to share their overall learnings associated with collaboration with wider industry</p>

PHASE 1

CNOOC recognised that adopting an innovative approach would help to enhance project delivery performance. Devising a 'contractor led solution' based on the strengths and expertise from within the supply chain, CNOOC set out on an alternative contracting journey which retained market competition, while offering the best collaborative solution for the BPII project.

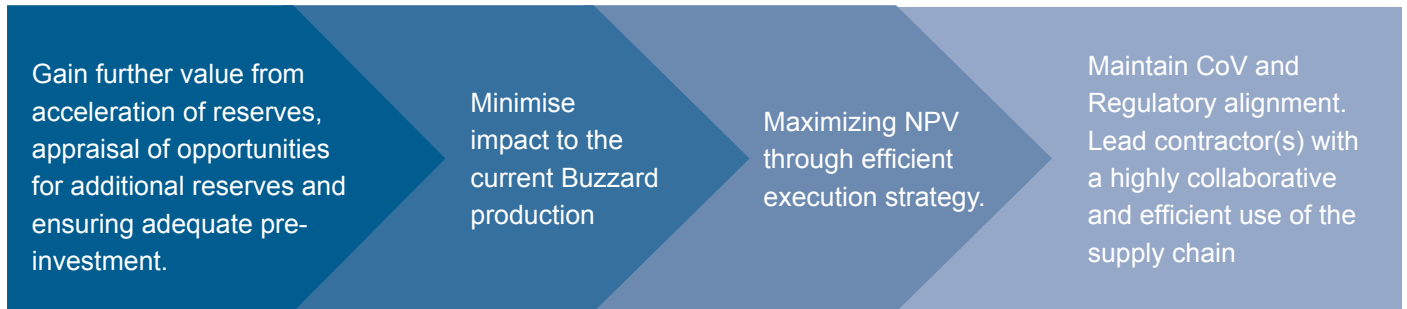
PHASE 2

In order to follow an alternative contracting route that would fully support a collaborative delivery strategy, CNOOC needed to retain the important market competition element whilst allowing contractor (and contractor delivery Alliance) technical and commercial offerings that could be assessed for their ability to deliver the project objectives. This required CNOOC to share sensitive information, such as its internal project cost estimate, at an initial launch event, even with organisations that might not ultimately be involved in the successful Alliance.

PHASE 3

In pursuing its contractor led solution, CNOOC understood the critical importance of members of the successful delivery Alliance reciprocating and reflecting the levels of trust that were being placed in them. It is to the credit of CNOOC (as the lead project entity) and all members of the delivery Alliance that authentic levels of mutual trust were quickly developed - a solid foundational platform for successful delivery performance.

Buzzard Phase II - Project Charter



Project Objectives

Safely deliver the BP11 project to the required 'fit for purpose' standards, whilst maintaining the optimal schedule and adding maximum value to CNOOC, its partners and the Alliance.

We are all committed to:

Cultivating a 'Win Together' & collaborative environment

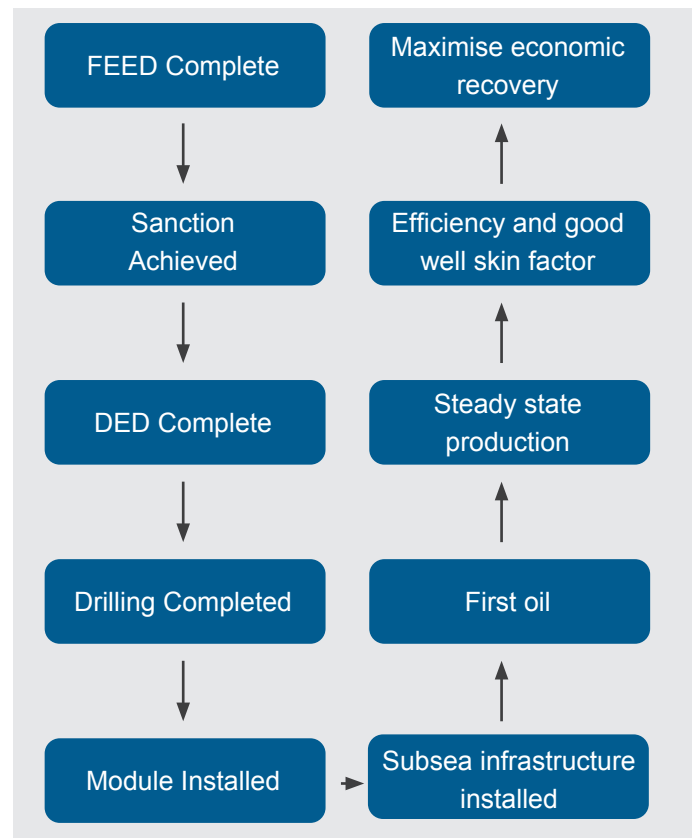
- Develop & Maintain relationships building a culture of trust and openness.
- Give positive and constructive feedback.
- Be prepared to give and accept challenge openly.
- Develop a collaborative and efficient handover process to operations.

Embracing challenges and overcome problems collectively (One Team)

- Embody/Promote a 'can do' attitude – every problem has its own solution.
- Confront challenges together as a team.
- Support and help implement solutions .

Demonstrating effective and collaborative decision making

- Make decisions that benefit the project over our own interests.
- Communicate clear & unambiguous decisions.
- Develop & encourage a no-blame culture.
- Help & support the team.



The project utilised an outcome-based contracting methodology rather than the conventional transactional contracting model, which focused the project management teams on delivering key milestones to achieve additional profit on the project beyond the fixed fee contained in each project contract.

Individual contracts were placed directly with CNOOC with an overarching Alliance agreement sitting above all contracts binding the teams to an Alliance between the six companies and CNOOC.

The Alliance contractors worked together to deliver the project through an outcome focused KPI model. The Alliance agreement set out KPIs based on three different deliverables:

- Behaviours (reviewed, scored, agreed and paid quarterly).
- First oil and water injection target dates (agreed on attainment).
- Facilities performance for the first 12 months after first oil.

The ECITB collaboration toolkit was used as a model to benchmark Alliance culture and a set of project specific behaviours KPIs were developed to help reinforce and maintain collaborative behaviours within the Alliance and ensure that all decisions were made in the best interest of the project.

Teamwork and Team Achievement

An integrated project team was established where positions were filled from CNOOC and the Alliance contractor teams. The composition of the integrated project team was carefully considered to give the best opportunity to support the BP11 project, fostering a collaborative and integrated delivery focused team, which was co-located in CNOOC's office. This collaborative approach allowed the project management team to be right sized, reduce the number of interfaces, and avoid unnecessary duplication of roles within the project team.

The Alliance agreement created a commercial framework to support the BP11 project, share the risk more evenly and incorporated incentivisation for the key project deliverables.

The Regulator's View

"It was very encouraging to see the ECITB Project Collaboration Toolkit being put to such good use by CNOOC and its partners on Buzzard Phase II."

"They provided a great example of operators and suppliers collaborating on innovative and incentivised commercial models to deliver success in the face of major challenges, brought on by Covid-19."

"The pursuit of value-adding contracting strategies in the early stages of projects is a pillar of the NSTA's Supply Chain Action Plans and our Supply Chain Stewardship Expectation, which outlines how companies should engage with the service sector."

Scott Robertson

Director of Operations, North Sea Transition Authority (NSTA)



Outcomes and Measures of Success

Safety

The project achieved an excellent safety performance.

Project Schedule Performance

The overall project timescale was revised to a new internally and externally agreed schedule, due to the impact of deferral of the FPS shutdown and Covid-19 pandemic response which impacted platform manning levels. Despite this, the project was delivered ahead of revised completion dates and within 2021 work programme targets.

Operational Performance and Reliability

In achieving the revised project schedule, the integrated project team maintained high uptime for the facility and there were no unplanned platform outages throughout the entire project installation and tie-in.

Project Cost Performance

The Alliance model afforded the project the advantage of protection against the potential impact of significant changes (e.g. schedule extension) and was delivered for an appreciable saving (of the order of 5-10%) against the likely out-turned cost if it had been structured against a traditional contracting model.

Conclusions

The successful delivery of this major UKCS oil and gas project, through a competitively tendered Alliance contract delivery model, provides compelling evidence of the benefits of project collaboration compared to conventional contracting models and relationships.

As demonstrated by this case study, the ECITB's Project Collaboration Toolkit is an extremely valuable resource to help support collaborative working relationships major projects.

The **ECITB Project Collaboration Toolkit** is a 'free' resource which can be readily used, without licence, to support the collaborative delivery of engineering construction projects in all industry sectors. It can be accessed and downloaded, together with associated project case studies through the following link:

www.ecitb.org.uk/project-collaboration-toolkit/