Oil & Gas Project Management Steering Group



PROJECT COLLABORATION TOOLKIT (PCT)

APACHE CALLATER FIELD DEVELOPMENT PROJECT

CASE STUDY



THIS CASE STUDY HIGHLIGHTS THE BENEFITS OF ADOPTING A COLLABORATIVE STRATEGY TO THE DELIVERY OF A NORTH SEA SUBSEA TIE-BACK PROJECT. SUCH PROJECT SCOPES ARE COMMON IN THE MATURE UKCS BASIN WHEN NEW FIELD DISCOVERIES ARE TIED BACK TO EXISTING INFRASTRUCTURE IN ORDER TO OPTIMISE INVESTMENT COSTS.

THE ACHIEVEMENTS, THROUGH COLLABORATION, OF THE APACHE CALLATER PROJECT ARE NOTABLE AND OF POTENTIAL VALUE TO THE ENTIRE SECTOR. ALTHOUGH THE PROJECT WAS WELL INTO THE EXECUTE PHASE WHEN ECITB LAUNCHED THE PROJECT COLLABORATION TOOLKIT (PCT) IN 2016, THE PROJECT TEAM RETROSPECTIVELY USED THE PCT TO ANALYSE AND EVALUATE THEIR COLLABORATIVE EXPERIENCES AND SUCCESSES AND RECORD THEIR LEARNING FOR FUTURE BENEFIT.

The Callater field jointly owned by its operator Apache Corporation (55%) and Shell (45%) was discovered in June 2015, commenced initial production in August 2017 and is currently producing 14,000 boed. Callater was developed as a tie-back to the Beryl Alpha platform and required the expansion of the platform's processing capacity to transfer hydrocarbons from the Callater manifold to the Skene manifold where hydrocarbons are then exported to the Beryl Alpha platform.

Subsea 7 was awarded the EPIC contract to supply the subsea equipment and pipeline bundle system. A team, including Apache themselves, known as "The Quad" – Apache (project topsides team), PD&MS (engineering design), QEDI (commissioning), GEG (black & white trades) – were engaged for the topsides work.

The selection of these collaboration partners is identified as an important enabler to the collaboration's speed of delivery and overall success. From previous work with Apache the relationships and ways of working were already established so that only minor adjustments to the team structure were necessary just for this project.





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KEY CHALLENGES:

PHASE

PHASE 2

PHASE3

The following challenges were identified and overcome through the adoption of a collaborative project strategy, as retrospectively evaluated and verified against PCT principles

Apache recognised that the aggressive completion target (i.e. "first oil" milestone date) for the project would not be achievable if traditional sector approaches were deployed. Existing relationships, based on trust and mutual respect, had been formed with Subsea 7 and Quad from earlier work experiences. Apache chose to work with these known entities, having a predisposition to collaborative working, as leverage for successful project delivery.



The project would be unable to deliver against its objectives without effective and efficient collaborative team performance. Known partners (Subsea 7 and Quad partners) were engaged immediately after field discovery to provide pace and innovative thinking toward optimising project cost whilst enhancing speed of delivery. With Apache providing leadership vision, strategic intent and boundaries of responsibility, a collaborative environment was created in which a lean, fully integrated project team were able to perform to their best without role overlap and duplication of effort. Oil & Gas UK Efficiency Task Force learnings were also implemented by the project supply chain in a sustainable manner.

A lean set of work processes were utilised to support the project during execution. Following earlier 'fast tracking' of project development approvals with the regulatory bodies (OGS, BEIS and HSE), this allowed further removal of unnecessary complexity, bureaucracy and levels of assurance that would negatively impact on progress.

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In recognition of its achievements, the project was recognised with the Oil & Gas Authority (OGA) – MER (Maximising Economic Recovery) UK 2017 Award at the Oil & Gas UK 2017 Awards.



OUTCOMES:

Through active collaboration the Apache Callater project team were able to achieve:

- Fast ramp up, less than 6 weeks after award(s)
- Critical items of scope ordered/ completed early
- A smaller team size, efficient communications, no man-marking or role duplication
- 10% cost saving overall against original approved budget
- A better, more effective way of working and:
- Faster project delivery and start-up

CONCLUSIONS:

The Callater project discovery well results came in during August 2015 and it achieved first oil in May 2017. A rapid development, 23 months after discovery.

It was five weeks ahead of the field development schedule and achieved 10% savings on budget. The project had an outstanding safety record.

The project team put their success down to following an effective collaborative approach from the very beginning using pre-existing arrangements with topsides and subsea contractors. They all know the Callater project is a repeatable, transferable and sustainable example of delivery with collaboration at its core.





