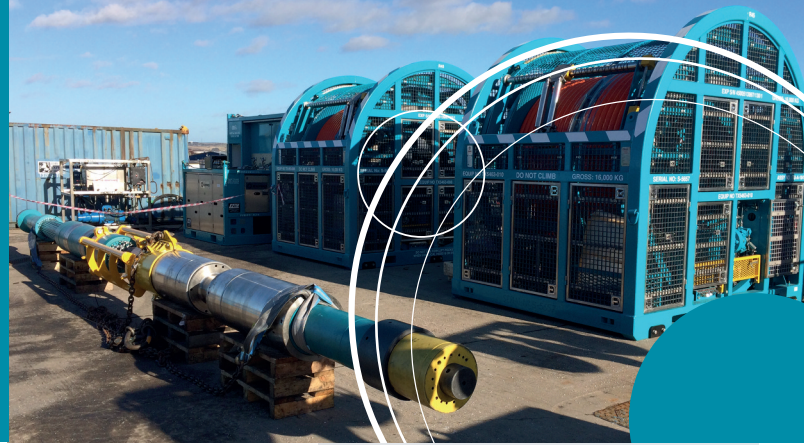


**EXPRO**

WELL FLOW MANAGEMENT™

/ Expro Excellence Subsea

Expro's Subsea team adapt to BP's requirements for Shah Deniz 2 to provide a high pressure, high integrity, fast response subsea landing string



Objectives

- BP required a subsea completion safety system for the well commissioning of Shah Deniz 2 (SD2), a subsea development in Azerbaijan; This project is one of BP's largest investments requiring a 12 year drilling program to access 50 trillion cubic feet of gas
- Particular requirements were for a fast response system rapidly securing these high rate wells while taking out some of the complexity of Expro's deepwater electro-hydraulic control system
- Technology that was robust for long-term use in a harsh operating environment with well pressures of up to 15,000 psi, with the capability of functioning in wells where there is the potential for debris
- The capability to provide full local support, including a Baku facility to fully service equipment over the duration of the contract, and engineering support
- BP were looking for a partner that would support and encourage the development of Azeri nationals

Expro Excellence

- Expro developed a new rapid response control system, focused on safety critical functions
- Developed a new 15K lubricator valve, based on Expro's unique high integrity ball valve (HIBV) technology

- Delivered a 15K ELSA-HP system on schedule and have conducted a successful SIT (system integration test)
- New facility in Baku, designed for full subsea service capability
- Recruitment of four Azeri nationals and investment in a comprehensive training programme, that included secondments to Broussard and Aberdeen

Value to client

- Delivery of a system that will enable the safe completion and flow back of high rate, high pressure wells
- A system that has met BP's exacting technical requirements and has passed through BP's TRAP (Technical Risk Assurance Process)
- On time delivery of a complex system allowing BP to maintain the schedule on one of their most important field developments
- Design and qualification of equipment built on established technology that meets BP's exact requirements for the SD2 project
- Design and qualification of equipment which has an application on other BP developments

Direct-hydraulic (DH)
Electro-hydraulic (EH)
Expro Landing String Assembly (ELSA)
High pressure (HP)
High debris (HD)



It has been a fantastic 18 months since the contract was awarded and based on the fact there was a lot of upfront engineering, interface project management, and riser analysis work to be conducted in the initial months, this is a fantastic achievement. Expro has been a pleasure to work with due to the one team approach and willingness to assist BP whenever required.

Graham Beattie

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Contact

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