

AIOC Overcomes Severe Cost and Schedule Overruns with Validation and Verification Solution



Overview

Founded: 1908

Customers: 13 Million

Employees: 97,000

Reserves: 17.7 billion barrels of oil and gas equivalent

Refineries: 18

Presence: Active in 26 countries

Turnover: \$266 Billion

Background

The Azerbaijan International Operating Company (AIOC), is a consortium of 10 major international oil companies. In conjunction with SOCAR, the company is developing the Azeri, Chirag and deep-water portion of Gunashli fields in the Azerbaijan sector of the Caspian Sea. Their 30-year Production Sharing Agreement (PSA) was signed on September 20, 1994, ratified by Parliament on December 2, 1994, and went into effect on December 12, 1994. The contract area has estimated reserves of more than 4 billion barrels of oil.

As a consortium member, British Petroleum was charged with operating the first of three rigs and hired the Athens Group to validate and verify a key drilling equipment system.

Benefits

- **Hundreds of thousands of dollars**
Delayed commissioning was costing AIOC approximately \$150,000/day for two weeks. Cost of Athens Group engagement was less than one day's slip-page.
- **Commissioning timeline shortened**
First oil dates accelerated because design flaws were identified and corrected.
- **World's best safety record**
For over three years, AIOC has the best safety record in delivering hard fast-track, world-scale projects.
- **Continued time and cost savings**
Athens Group caught the vendor error and thus improved vendor relationship with AIOC, preventing future delays.

British Petroleum, one of the largest oil companies in the world, had contracted with an industry-leading drilling equipment vendor to produce a full drilling package for a state-of-the-art cyber-rig. The project was behind schedule, with every day of delayed commissioning costing ~\$US 150,000. Similar projects from this and other vendors had resulted in serious cost and schedule overruns and major implementation problems.

Athens Group consultants were engaged to perform a full validation and verification of the hardware and software systems in the drilling package. There were two goals identifying specific problems that could be found and fixed, and also of understanding whether there were fundamental issues with the design approach that were contributing to the overruns being experienced.

Solution Summary

Athens Group completed a thorough analysis of thousands of pages of documentation in under a month, providing a validation and verification report with dozens of detailed feedback items for the supplier to address. A subsequent review meeting was held at the supplier's offices in Norway to gain general agreement by all parties to the findings. In addition to some specific errors in the design, which were corrected, it was agreed that the supplier did not have adequate requirements capture and process management methods given the complexity and scope of the integrated system.

Therefore, the delivered software was high quality in the sense that it did what the programmers intended, but it did not do what the rig operator needed it to do. This was a fundamental cause of many of the significant overruns in the project. A key element of the solution was that Athens Group's participation in the review process brought the supplier into consensus on this issue and convinced them that there was room for improvement—thus mitigating future problems with this vendor.

Value

The cost savings to the client, on completion of the defined changes from the validation and verification report, are expected to be in the multiple hundreds of thousands of dollars per rig, as commissioning timelines are shortened and first oil dates are moved up. In addition, the consensus negotiated by Athens Group between the client and the supplier was critical to the value of this project. With this consensus in hand, the client was able to begin work on a partner relationship with the supplier with the goal of improving the requirements processes and ultimately slashing cost overruns and schedule delays. The supplier was so impressed with Athens Group that they requested further consulting assistance from Athens Group to help implement the process.

Athens Group was established in 1998 by a group of highly experienced consultants with definite ideas on how to improve the delivery of technology services for a better experience - both for the customer and the consultant. The results speak for themselves: 100% of our customers are referenceable and 70% of our customers have engaged us for more than one project. The majority of the Athens Group leadership team has now worked together for over fifteen years, and our founding ideals and values are still firmly in place. Contact us at www.athensgroupoilandgas.com or info@athensgroupoilandgas.com.



www.athensgroup.com

877-499-8396