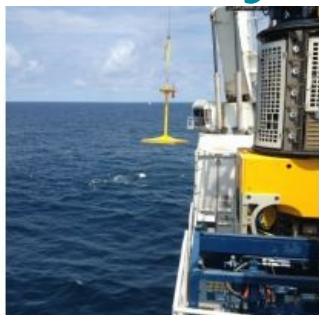


Total Saves Time with Sonardyne Fusion 6G



Together with its construction and survey partners, French oil company Total, operator of the Egina oil field offshore Nigeria, has successfully installed a Fusion 6G subsea positioning network to support its development of the USD15 billion project. Supplied by Sonardyne International Ltd, UK, the acoustic technology specified for Egina, which is still ongoing, included a field-wide array of Compatt 6 seabed transponders that were deployed and made ready for work eight days ahead of schedule.

Located 150km off the coast of Nigeria, in water depths of up to 1,750m, the Egina field covers an area of around 500 square miles. Infrastructure will include an FPSO, an oil offloading terminal and subsea production systems that will include 52km of oil and water injection flowlines, 12 flexible jumpers, 20km of gas export pipelines, 80km of umbilicals,

and subsea manifolds. Production at the field is expected to reach 200,000 barrels per day at its peak.

Fusion 6G is Sonardyne's sixth generation of Long BaseLine (LBL) acoustic positioning system. Planning for Fusion's deployment at Egina had begun several months earlier and involved senior project managers and surveyors from Total and its sub-contractors, working closely with personnel from Sonardyne's own Survey Support Group (SSG). The SSG is a specialist department staffed by experienced offshore personnel, each of whom also possess unique knowledge of Sonardyne's acoustic and inertial navigation technologies and how best to configure them for any given scenario.

Project Setup

The work undertaken by the SSG for Egina included analysing the proposed location for each of the Compatt transponders in the seabed network, and in doing so, verify that there was clear line of sight between each transponder in order that they can reliably range to each other. In addition, the SSG team mapped out seabed coverage and the expected positioning performance of the Compatts at all points of interest. This essential process involves specialist software and also helps to identify the optimum quantity of transponders that are needed to meet a project's positioning specification.

At Egina, the investment in time planning acoustic operations onshore, was rewarded with a highly successful offshore LBL campaign. The wide-area transponder array was deployed, installed and calibrated more than a week ahead of schedule and without any further direct support from Sonardyne and the SSG.

Image: A Sonardyne Compatt 6 transponder that forms part of the field-wide array of transponders at the Egina oil field is lowered in a frame down to the ocean floor.