

Saipem Upgrades to Sonardyne Autonomous Monitoring Transponder Technology



International oil and gas turnkey contractor, Saipem, has extended the capability of its Sonardyne sixth generation (6G) acoustic positioning transponders, adding functionality that makes the equipment now suitable for a wide range of subsea autonomous monitoring tasks. The work to convert the Compatt 6 instruments into Autonomous Monitoring Transponders (AMTs) was undertaken by engineers based at Sonardyne's Brazilian headquarters in Rio das Ostras as part of a wider scope of work to inspect, service and re-calibrate Saipem's inventory of Long BaseLine (LBL) acoustic technology located in the region.

Sonardyne's AMT enables users to conduct long endurance, remote monitoring surveys without the need for a surface vessel and ROV to be present throughout the project.

Applications for it range from a single instrument deployed to measure tidal variation, to a large, field-wide network capable of detecting subtle trends in structure movement, pipeline creep and seabed settlement.

Years of Endurance

The autonomous functionality built into every AMT enables it to operate for several years without operator intervention. Measurements from its suite of onboard sensors are logged in the unit's memory and can be recovered at any time by an AUV, ROV or vessel-of-opportunity using high-speed wireless communications.

The 6G technology platform on which both Compatt 6 and AMT are built is very versatile, and enables users to upgrade and switch capability as their operational needs grow and stretch. Paul Smith, Operations director of Sonardyne Brasil added that the engineering and equipment testing facilities Sonardyne has in Rio das Ostras meant the work to service Saipem's LBL hardware and convert some of their Compatts to AMTs, could be completed without the cost and delays associated with sending equipment out the country. For the customers, this means they can get back to work and keep their projects and budgets on schedule.