PRESS RELEASE

Alcatel Submarine Networks Successfully Deploys OptoWave PRM Project on Mero Field, Operated by Petrobras.

Paris, France, November 24, 2026 – Alcatel Submarine Networks (ASN) is proud to announce the delivery of a Permanent Reservoir Monitoring (PRM) system on the giant Mero field, operated by Petrobras, in partnership with Shell Brasil, TotalEnergies, CNPC, CNOOC and Pré-Sal Petróleo SA (PPSA), as contract manager and representing the Government in the adjacent area of the field located deep offshore in the pre-salt area of the Santos Basin, 180 kilometers off the coast of Rio de Janeiro in Brazil.

Mero field has a high Gas Oil Rate (GOR) and high CO2 content. The reservoir management strategy of Petrobras revolved around mitigating gas to maximize oil production. Significant benefits are expected by optimizing Carbone Capture Utilization and Storage, lowering carbon intensity and by maximizing the oil recovery factor thanks to more pro-active reservoir management based on frequent and high-quality 4D seismic PRM data.

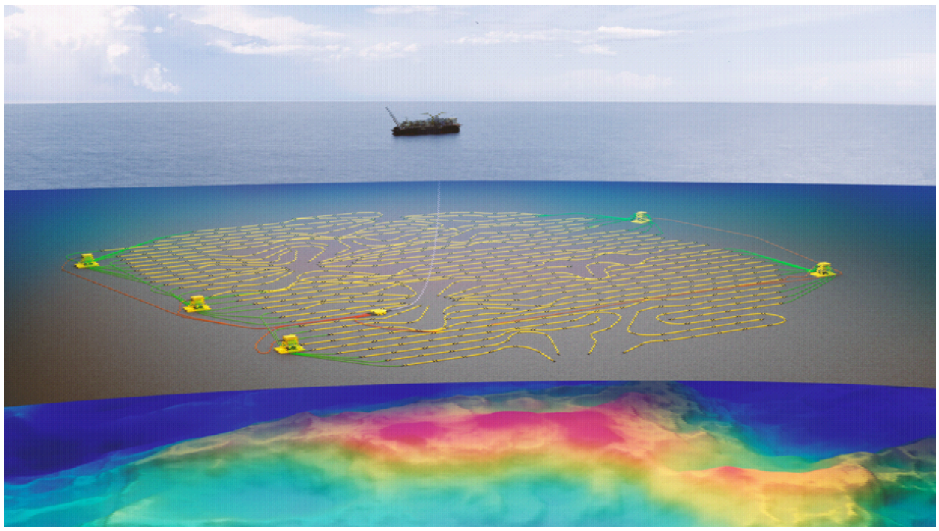

Image: Agência Petrobras

OptoWave PRM system

The OptoWave PRM system is a 4D seismic ocean bottom cable technology that can be permanently deployed in water depths down to 2500 meters. The fiber optic OptoWave PRM technology is based on a fully passive subsea optical architecture, with no moving parts, no electronics and no requirement for subsea high voltage cables, hence enabling outstanding field proven reliability.

An Ambitious Project Successfully Delivered

Launched in 2023, the project included a two-year engineering and production phase, completed on schedule, followed by a marine installation phase completed in Q1 2026.

The PRM LIBRA project covers the Mero 1 and 2 oil production parts of the field, at a depth of 2,100 meters. The system covers approximately 220 square kilometers with 4425 seismic stations. Each seismic station

combines 4-component optical sensors, one hydrophone and 3 accelerometers in the 3 perpendicular directions.

To ensure ±10-metre precision in cable installation on the deep-sea seabed, ASN's marine team developed an Active Touch Down Monitoring *(ATDM)* tool, which has now proven to be effective at 2,100 meters depth for the PRM LIBRA project.

An Operational and High-Performing System

The PRM LIBRA system is now operational and in use by Petrobras. The first seismic survey was completed on 27 August 2026, providing high-quality 4D seismic data as expected. The permanent nature of a PRM system enables cost-effective ad-hoc seismic surveys anytime, typically once or twice a year, and as well as the interpretation of raw 4D seismic data acquired in very short cycle times.

The PRM system will also be used for micro seismic passive monitoring between two active seismic surveys.

About Alcatel Submarine Networks (ASN)

For over 160 years, Alcatel Submarine Networks (ASN) has been a leading player in the submarine cable industry, with more than 850,000 km of optical systems deployed worldwide—equivalent to 21 times the Earth's circumference.

With 3 factories located in Europe and an exclusive fleet of 7 cableships, ASN designs, develops, deploys, and maintains turnkey submarine transmission systems for telecommunications operators, digital content providers and cloud services. Additionally, ASN serves the offshore energy market with dedicated technologies and is actively continuing its investment in the development of advanced subsea cable monitoring technologies to support new and existing clients in the security of Critical Undersea Infrastructure.

Leveraging a comprehensive service portfolio and unique expertise, ASN meets the growing and specific demands of its clients to deliver enhanced connectivity across seas and oceans.

ASN is 80% owned by the French State Investment Agency (APE).

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