

Oil and Gas

Onboard telecommunications

Technip has awarded AMEC SPIE Enertech and its subsidiary, Maintel, a turnkey contract to supply the telecommunications for an FPSO vessel being built for Total in Angola. Focus on an unusual contract in the offshore oil sector.

➤ What exactly is an FPSO, or Floating Production Storage and Offloading platform? Paul Lecadre, Oil & Gas telecommunication systems director and general manager of Maintel, explains: "FPSOs are ships over 300 m long with gross tonnages in excess of 400,000 tons that can be anchored in deep water. Deepwater oilfield discovery and oil production require the use of floating platforms that can be anchored in water exceeding 1,500 in depth. The FPSO produces and stores the crude until it is offloaded onto tankers via a loading buoy. Total, for example, is said to be considering building several FPSOs in the coming years."

AMEC SPIE is active in this market through its telecommunication systems for the oil industry. "We are also interested in the onshore market" stresses Paul Lecadre "because an onshore facility requires a much more extensive telecommunication infrastructure, and the sums at stake are considerable. Competition in the onshore telecom engineering, procurement and commissioning (EPC) market is much more open than in the offshore market." The strategy now being pursued by the AMEC SPIE Enertech/Maintel team is to position itself upstream with oil industry majors such as Total, ExxonMobil, ChevronTexaco, BP or Shell, thereby

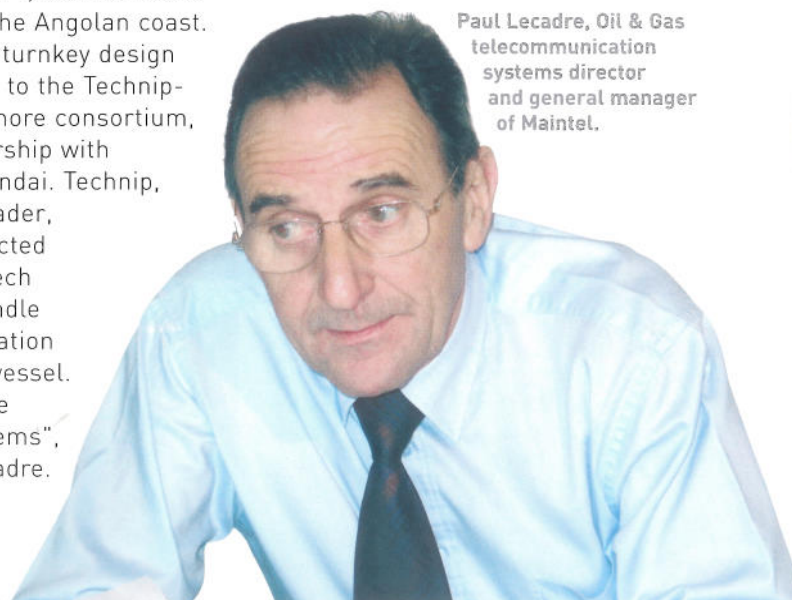
pre-qualifying itself for the whole spectrum of onshore and offshore projects. With regard to Total, the new contract for the FPSO in Angola will strengthen an already well-established position. The Dalia contract represents a flagship project for AMEC SPIE Enertech in the area of FPSOs, and the company aims to make it a reference for Total and the other oil industry majors.

Telecommunications for the Dalia FPSO

Total Exploration has recently started construction of an FPSO called Dalia, for use in developing the Dalia field, which lies beneath 1,400 m of water some 230 km off the Angolan coast. Total awarded the turnkey design and build contract to the Technip-Saipem-Stolt Offshore consortium, working in partnership with Samsung and Hyundai. Technip, the consortium leader, has in turn contracted AMEC SPIE Enertech and Maintel to handle the telecommunication work for the new vessel. "Our work package covers 14 subsystems", explains Paul Lecadre. "Maintel is contributing its specialist telecom

experience and AMEC SPIE Enertech is leveraging its turnkey export project management expertise. In keeping with this approach, AMEC SPIE Enertech is responsible for managing the project team." This contract, which was won in December 2003, represents the first step in the growth strategy being developed jointly by AMEC SPIE Enertech and Maintel. This strategy is set to receive a boost from the Oil & Gas Services division and our various geographical locations, both at project level and in terms of the related maintenance and operating services. ■

Paul Lecadre, Oil & Gas telecommunication systems director and general manager of Maintel.



In the centre, a model of the Dalia FPSO and its future telecommunication environment



ABOUT MAINTEL

Maintel was founded in 1987 and was acquired by AMEC SPIE Enertech in 2002. Maintel specialises in telecommunication systems engineering in onshore and offshore oil exploration and production environments; this expertise enhances AMEC SPIE Enertech's ability to design and build technology-intensive systems. Maintel employs a team of around ten specialists.

14 subsystems cover the full range of telecommunication resources required by the FPSO's operation

- Voice/data network (PBX – LAN – WAN – Ethernet – FAX) and fibre-optic cabling infrastructure.
- Public announcement and visual and audible alarm (PA/GA) broadcasting network.
- Closed-circuit video surveillance (CCTV) network.
- UHF radio network enabling local communications between mobiles, and between mobiles and fixed terminals on the FPSO.
- Point-to-point terrestrial trunk links to carry voice/data traffic between the Dalia FPSO and the Girassol FPSO already in service.
- Point-to-multipoint terrestrial trunk links to carry voice/data traffic between the Dalia FPSO and semi-mobile and mobile installations (e.g. rigs and ships) operating in its area.
- VHF radio links with approaching helicopters and ships working in the area.
- Redundant Dalia-Girassol point-to-point satellite links (Inmarsat B and Mini M).
- Backup sea-to-shore MF/HF radio link.
- Meteorological, swell and marine current data measurements systems.
- Geo-location systems to control the positions of the FPSO and any tankers approaching for loading.