

Subsea Data Acquisition Capabilities Extended

Building on its OceanStar system, Fastwave has recently formed a partnership with L-3 Communications to develop commercial applications for a networked underwater data acquisition system (NUDAS), integrated with the Iridium satellite system. Applications include environmental, oceanographic and subsea infrastructure data acquisition.

Since 2007, Fastwave's OceanStar system has provided near real-time data acquisition from subsea sensors via the Iridium satellite system. The system is used by major offshore energy organisations for marine environmental monitoring, operating at more than 30 sites in the remote, cyclone-prone tropical waters surrounding northern Australia.

Mike Gallagher, Managing Director of Fremantle, Australia-based L-3 Communications said, "L-3 Communications is pleased to be partnering with Fastwave on the NUDAS system. Fastwave has a proven track record in this field and the ability to introduce the full scope of this technology into the commercial market. L-3 has developed advanced technology in through-water communications as well as undersea networks and sensors through its partnerships with the Australian, US and UK Departments of Defence. This same technology will provide equally significant benefits to the high quality data acquisition applications in the Oil and Gas sector. L-3 looks forward to partnering with Fastwave in delivering this highly reliable system."

The subsurface system uses L-3's through-water acoustic communications technology between distributed sensor nodes. This advanced signalling technology has been proven in both deep water and the harsh multipath shallow water environment.

Nick Daws, Director, Fastwave added, "The combination of L-3's advanced undersea sensor network technology, the reliability of Iridium's global satellite telemetry capabilities and Fastwave's ability to integrate them into a seamless data system will provide new opportunities to deliver timely, cost-efficient information from the sea floor for a wide range of applications."

The system can accommodate a wide range of sensor types, depending on the application. The NUDAS configuration uses two or more remote sensor nodes to communicate with the central access node, and the modular design enables additional nodes to be easily added.

The central access node relays the data to the sea surface, where Fastwave's OceanStar system delivers the sensor readings via Iridium satellite telemetry and a browser-based data management system anywhere in the world, within seconds.

Greg Ewert, executive vice president, global distribution channels, Iridium, commented, "Iridium's value-added partners, such as Fastwave, are largely responsible for Iridium's surge to a position of market leadership in mobile satellite data, leveraging Iridium's global coverage and low-latency two-way data links to develop innovative solutions for applications such as underwater telemetry."