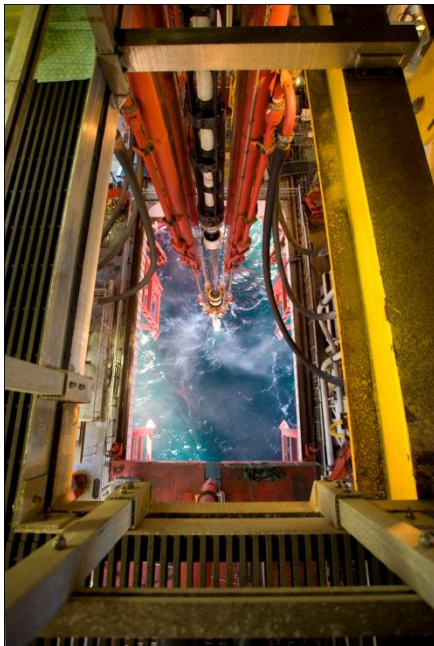


WFS and MCS Kenny deliver Wireless Deep Water Riser Monitoring system



(Livingston & Aberdeen, November 24 2011) WFS Technologies, the world's leading supplier of radio and acoustic solutions for underwater communication, navigation and power transfer, and MCS Kenny, a world leader in compliant riser design have announced the delivery of a wireless riser monitoring system for use in deep water environments. Donogh Lang, senior riser software consultant, MCS Kenny said "**Optima-Wireless** is to be offered jointly by MCS Kenny and Fugro, with wireless capability from WFS and the riser management tools for planning and monitoring operations from MCS Kenny and Fugro; this will enable riser response to be monitored in real-time to predict signs of early failure and to improve future design."

Interest in monitoring motions and strains on risers has grown exponentially with the migration of exploration and production to deeper waters. Designs have become increasingly more complex to allow operators to drill into these new pockets in reservoirs. During the equipment design phase, a system's estimated lifetime is based on an assumed load during its operational lifetime. If the actual system loading exceeds design assumptions, then operational life and system safety can be compromised.

Lang says that "Monitoring of data using **Optima-Wireless** allows a real-time evaluation of load on the system, helping to more accurately predict a "safe working lifetime" for equipment. This can help to improve safety as well as extend equipment life, which in turn means higher levels of hydrocarbon extraction."

A cluster of sensors is typically located around the base of the riser and the wellhead. These sensors transmit data using subsea RF (Radio Frequency) from WFS Technologies, to a central node, which centralises the data and transmits it via acoustic modem to a second acoustic modem located near the top of the riser. From here, data is transmitted through the splash zone (where acoustic signal would suffer) using RF, to a receiver mounted on a vessel. The delivery of real-time riser sensor data allows the fatigue impact of riser motion to be accurately determined.

Ian Crowther, senior VP and general manager of WFS says "Our **seetooth+acoustic** technology captures the best of both radio and acoustic, for communication underwater. **seetooth®** will communicate in shallow water where acoustic technology is limited, and will easily pass through the surface of the water into the air. Acoustics will not penetrate into the air, but will communicate at low bandwidth over a great distance, up to 20kms; whereas **seetooth®** communicates most effectively at short range."

Crowther points out "The benefit of wireless transmission of data in deep water is that cabling to the riser sensors is not required, making retrofit as well as installation more simple. Sensors can be fitted in "hard to reach" areas such as on wellheads, where cabling is impractical." He adds "In addition, negative environmental incidents can be significantly reduced with accurate termination of drilling and well intervention operations. The combination of complementary RF and acoustic

technologies can extend the capability of both **seatooth**® and a conventional acoustic modem, offering a robust solution for subsea challenges in deep water.”

The system was delivered as a project funded by the Technology Strategy Board, the UK’s national innovation agency. <http://www.innovateuk.org/>

Notes for Editors:

About WFS:

WFS Technologies is the world’s leader in commercial application of through water and through-ground wireless radio frequency (RF) technology for communication, navigation and power transfer. Our field proven expertise in wireless connectivity is delivering cost savings and new capabilities to the Subsea and Homeland Security & Defense industries worldwide.

WFS’s robust communications and sensing products extend the reach of conventional communications, telemetry, control systems and sensor networks providing cost savings, improvements in operational performance and flexibility. Headquartered near Edinburgh in the UK, WFS has sites in Aberdeen, UK, Belfast, Northern Ireland, and Houston, USA.

For more information about WFS Technologies and its products, visit the company’s website at: www.wfs-tech.com

About MCS Kenny

MCS Kenny is a world leader in compliant riser design to floating production and floating drilling facilities, with an extensive track record across all riser system types and water depths. The company also provides advanced structural analysis and technology development capabilities to complement and support the design and project management capabilities of its sister company J P Kenny. MCS Kenny is part of Wood Group Kenny the world’s largest specialist subsea, pipeline and riser engineering and management contractor employing more than 2,100 at over twenty locations worldwide, and is part of international energy services company, Wood Group.

For more information about MCS Kenny, visit the company’s website at: <http://www.mcskenny.com>

About Fugro

Provides the people, equipment, expertise and technology that supports the exploration, development, production and transportation of the world’s natural resources. Fugro grows organically and through acquisitions, and at the end of 2010 employed some 13,500 staff in more than 50 countries. www.fugro.com

About Optima:

Optima is a range of tools providing guidance for planning and execution of operations with drilling and intervention risers and is offered jointly by MCS Kenny and Fugro, combining their experience of riser analysis software and offshore instrumentation.