



Real Time Workflows for More Efficient and Safer Deepwater Drilling Operations

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Real Time Operations Centers and Collaboration Rooms allow professionals the ability to create the perception of being on the rig or platform even when they are back in the office. Using leading edge high definition visualization technology and new software and standards for data transfer, new workflows have been developed to make upstream operations much more efficient and safer.

Examples will include real time remote operation workflows for:

- Immediate Time-Depth Correlation between drilling and seismic
- Real Time Pore Pressure Prediction
- Monitoring of downhole and subsea data for production optimization
- Better and faster identification of lithology and fluid
- Immediate optimization of drilling parameters
- Real Time equipment monitoring to predict and reduce downtime

With the acceptance of WITSML as the cost-effective standard for information transfer from remote drilling rigs, a number of successful implementations of real time remote access projects have now been completed.

All data at a remote drilling site is made available from a single source that can be accessed from anywhere in the organization. This includes the following data, plus others:

- All time-indexed drilling data
- LWD / MWD data
- Wireline data
- Cementing data
- Weather data
- Equipment monitoring data

With the upstream oil and gas industry dominated by workers aged 40 to 55, new ways of working are being developed that allow maximum use of available experience. This also allows experience and knowledge transfer to the new professionals that will be needed in the industry to replace this aging workforce.

Immediate access to ALL remote data and high definition video from the remote site allows access to the right data by the right person at the right time and with the right security. Transportation costs are reduced. More efficient use is made of each specialist's time. Decisions are made faster and better.

We will look at case studies that show how making all real time and historical data available from a single source allows better decisions to be made. The talk will pull on the experience gained from over 70 real time remote operations projects, with examples of interest to petrophysicists, geoscientists, drillers, and other professionals in the asset team.



