Digital Drilling Conference

VENUE:
Måltidets Hus - Ipark
Richard Johnsen's gate 4
4021 Stavanger

DATE:
Wednesday 31. May 2017

TIME:
KI 08.15

Programme

08:15  Coffee and registration
08:45  Welcome and introduction                      Erlend H. Vefring, IRIS
09:00  Automatic Drilling Control, Experiences       Bjorn Rudshaug, Statoil
        and Future Plans
09:25  Closed Loop Downhole Automation               Hege Kverneland, NOV
09:50  Technology Development Needs and              Per Lund, Odfjell
        Future Business Opportunities for a Drilling
        Contractor
10:15  Break with coffee and fruit                   Sveinung Lofthus, Sekal
10:30  Technology Uptake of New Digital Drilling     Sveinung Lofthus, Sekal
        Solutions
10:55  High Speed Telemetry and Horizontal           Ola Vestvik, Reelwell
        Drilling with Dual Channel Drill Pipe
11:20  Technology Strategy and Application,          Øyvind Salvesen, OG21
        NCS perspective
11:45  Lunch                                        Øyvind Salvesen, OG21
        and RCN
12:15  Use of Quantitative Risk Analysis Methods     Eric Cayeux, IRIS
        to Determine the Expected Drilling
        Operating Window Prior to Operation
        Start: Example from Two Wells in the
        North Sea
12:40  Advanced Analytics and Digital Strategies     Ashwani Dev
        Halliburton
13:05  Drilling Operation of the Future              John Macpherson,
        Baker Hughes
13:30  Closing
Digital Drilling Conference – Introduction

Erlend H. Vefring, IRIS
Stavanger, 31/5 - 17

8 June 2017
Digitalization

5 main categories define digital

- **Advanced analytics**
  - New analytical methods

- **Robotics and automation**
  - Eliminate the need for human intervention in non-decision making functions

- **Process digitalization**
  - Digitization of business processes

- **Connectivity & sensing**
  - Interconnection of objects and personnel

- **Business model innovation**
  - Completely new business models

Redefining the delivery system

New customer value propositions
Subsurface environment and available data
An infrastructure for education, research and innovation

Realistic simulated drilling data to different user groups, through several interfaces.
Drilling Data Hub – DEMO2000 project

Why:
• Need for easy and reliable access to real-time data for processing by more or less complex applications

What:
• Real-time data acquisition and aggregation based on semantical descriptions

How:
• Real-time data acquisition and aggregation based on semantical description
Demonstration of Automated Drilling Process Control – DEMO 2000 project

Objective:
• Automatic management of drilling process to keep high performance with acceptable risk levels.

Method:
• Fully robotized drilling rig
• New generation DCS with open interface
• Improved suite of rig sensors
• Model-based drilling process automation

Deadlines:
• Demonstration in Openlab Drilling beginning of 2018
• Demonstration on full-scale test rig beginning of 2019

Partners:
• Statoil, AkerBP, ENI, Total, Robotic Drilling Systems, Sekal, Odfjell Drillig, NOV
Digital Drilling

- Instrumentation
- Uncertainty / Risk
- Planning
  Decision support
  Automation
- Systems integration
- Standards
- Data-hub
- Data analytics / Big data

8 June 2017
## Programme

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