

**Pre-Conference Day: 6<sup>th</sup> December 2016**

- 15:00 Exhibitor Set-Up**
- 17:00 Pre-Conference Registration Opens & Networking Drinks Reception**
- 18:00 Pre-Conference Day Ends**

**Conference Day 1: 7<sup>th</sup> December 2016**

- 07:00 Registration Opens – coffee will be served in the Technology Showcase Hall**
- 08:45 Opening Welcome** *Dean Murphy, Director, Offshore Network*
- 08:50 Chairman's Opening** *Michael Stundner, Co-founder & CEO, myr:conn solutions*

**Section One: North Sea Projects and Updates****09:00 Brent Charlie Ultra Late Life; Managing for Optimum Decommissioning**

- Discuss the benefits of early plug and lubricate (P&L) of shut-in wells for Brent Charlie as part of our journey into Ultra late life, including the multiple activities that could be streamlined or removed from the work scope with the driver changing from ensuring a well is fit for production; to ensuring a well is fit for decommissioning
- Review how well work focused on a fit for purpose approach including surface integrity test (SIT) requirements, to manage risk around long term shut in wells in preparation for plug and abandonment (P&A) with the rig
- P&L work ahead of work with the rig not only removed integrity risks around long term shut in wells but it also provided an opportunity to maximise tail end production. Balancing the use of the wireline crew between P&L and production optimisation has resulted in production gains that have effectively paid for the P&L work

*Danial Leybourne, Senior Production Technologist/Brent Decommissioning, Shell*

**09:30 Revitalisation of a Very Mature Field – Siri Case Study**

- Review the history of the Siri field and how the geology has created an unfavourable recovery mechanism dominated by coning phenomena and the associated poor areal sweep and high watercut, resulting in a slow recovery of oil
- Demonstrate how a detailed understanding of the dominant recovery mechanism and associated flow patterns in the reservoir can provide vital information that can be used to identify new opportunities
- Hear how DONG have used an injection well to target the oil-leg in an under-swept area to modify the recovery mechanism towards less water coning and improved sweep of under-swept regions

*Kent Johansen, Senior Reservoir Engineer, Siri Area Asset, DONG Energy*

**10:00 Brage Improvements Programme Update**

- See how Wintershall's current improvement programme has helped them to gain a 95% efficiency rating and how they are keen to continue improving through a return to their infill drilling programme
- Gain an update on some of the changes they have implemented which have resulted in an increase in production and a reduction in costs and how you can learn from their successes
- Hear the lessons learned from non-productive time and technical challenges during a recent drilling programme and how they plan to improve on the next round of drilling

*Alv Bjørn Solheim, Technical Director and Deputy Managing Director, Wintershall*

**10:30 Coffee Break in the Technology Showcase Hall**

## **Section Two: Production Operations**

### **11:00 Case Study: Integrated Intelligent Operations of Remote Production Facilities**

- Identify the routine operational crew duties which can be achieved remotely instead of with on board monitoring, including production and process equipment control
- Examine how continuous and automatically evaluated data streams allows predictable operational and maintenance performance thereby reducing asset risk and equipment OPEX
- Review how remote diagnostics with an associated preventative maintenance culture is a key part of remote platform monitoring and lowering OPEX

*David Hartell, Senior Development Manager, Premier Oil*

### **11:30 Ivar Aasen Project: Siemens Platform 4.0 - Digitalisation to Reduce OPEX and Improve Operations**

- Hear how the delivery of Siemens EICT solution to the Ivar Aasen Field Development has enabled remote monitoring and driven operating efficiencies
- Examine how the adoption of Remote Operations & Condition Based Maintenance of this field will improve HSE and reduce OPEX
- Assess how the utilisation of “Big Data” and remote control capabilities can reduce crewing and manning at your offshore facilities to create a leaner organisation

*Edmund Knutsen, Portfolio Manager Digitalisation, Siemens Oil & Gas*

### **12:00 Increased Production Through Advanced Perforation**

- Analyse how XL Perforating technology has enabled efficient recovery from mature North Sea assets
- Examine how XL Perforating has utilised wireline to convey over 300 feet of perforation guns to successfully fire and increase production
- Access the results from recent North Sea campaigns using XL Perforating and see how new technology can be efficiently implemented in mature basins to extend asset life

*Andy Martin, Advisor - Perforating, Schlumberger*

**12:30 Lunch Break in the Technology Showcase Hall**

### **12:45 – 13:30 Lunch and Learn Masterclass in the Conference Room**

#### **Improving Production: Spotlight on Compression Systems**

- Assess a case study where the lack of attention on compression systems led to shortages on production
- Understand how a North Sea working group mapped out where compressors were relative to their design and how continuous assessment can improve production performance
- Inefficiencies can no longer be tolerated in the current environment: assess how your organisation can improve production through regular evaluations

**Moderators:** *Sib Akhtar, Technical Director, MSE Consultants*

*Sudhir Mayor, Associate Consultant, MSE Consultants*

**14:00 Making Marginal Projects Sustainably Economic**

- See how a shift towards digital and remote controlled operations can help operators to save on CAPEX and OPEX and dispel some of the common misconceptions surrounding digital operations
- Hear how down-manning or minimal-manning of offshore operations can help improve efficiencies, reduce costs and extend the production life of assets and the economic cut-off for operators
- Review case studies from across the globe where a digital approach has been successfully implemented to challenge the status quo and the way assets are operated

*Tony Edwards, CEO, **Stepchange Global Consultancy***

**Section Three: North Sea Business Case****14:30 Commercial Models in the Current Environment**

- See how Halliburton have repositioned their business to provide greater service and cost efficiency for late life production projects in mature basins, like the North Sea
- Analyse recent production efficiency projects that utilised this model, showing the importance of developing new methodologies that address market constraints
- Hear results of these new production operations and the value realised by the operator, which have encouraged more effective recovery from mature assets

*Struan Urquhart, P&A Engineer, **Halliburton***

**15:00 Reducing OPEX and Extending COP**

- Review some of the challenges facing operators in the North Sea during late life projects and how companies can continue to drive efficiencies
- Maximise uptime of equipment through an innovative maintenance programme involving diagnostics and analytics to improve your production projects
- See how novel approaches to operations have been taken from other industries and implemented in the oil and gas sector to drive efficiencies and improve operations

*Stuart Gregg, Operations Manager, **Amec Foster Wheeler***

**15:30 Coffee Break in the Technology Showcase Hall****16:00 How are Operators Responding to the Downturn? Insights from Offshore Operations Benchmarking**

- Understand the overall trends in HSE, operating costs and production efficiency performance across the North Sea and other offshore basins
- Assess the areas where operators have made most improvement, the approaches taken so far, and how the performance bar has changed
- Highlight where the next wave of improvements could be safely made on cost and production, and the approaches needed to capture them

*Dan Cole, Senior Expert, **McKinsey & Co***

**Section Four: Data Driven Production****16:30 Software Business Models for the Future**

- Review the opportunities available to you by improving North Sea production efficiency and the prize we can all win
- Assess the opportunities of changing your software model for a new paradigm and how that can help to improve efficiencies within your business
- See how a system for experts which brings together disparate vendors in an AppStore for industry can provide real-world savings for the oil and gas sector

*Steve Aitken, Consultant Director, **Intelligent Plant***

**17:00 Building the Digital Oilfield**

- Hear how open source software technologies can help during offshore operations by integrating machine learning, petroleum engineering and knowledge discovery methods
- See how an automated workflow approach and the integration of IT technologies can help operators work more efficiently
- Avoid bottlenecks in the day to day operational decision making of an asset by handling large amounts of data in a more streamlined way

*Michael Stundner, Co-founder & CEO, **myr:conn solutions***

**17:30 Production and Value in a Mature Asset**

- Evolution of production efficiency and how to improve cost of production through lean value production and selective targets

*Steve Rose, Asset Manager (Northern North Sea), **Total E&P UK***

**18:00 Chairman's Closing Remarks****18:05 Networking Drinks Reception in the Technology Showcase Hall****19:00 End of Day 1****Conference Day 2: 8<sup>th</sup> December 2016****08:00 Registration Opens – coffee will be served in the Technology Showcase Hall****08:50 Chairman's Opening** *Tony Edwards, CEO, **Stepchange Global Consultancy*****Section Five: New Production Technology and Approaches****09:00 Exploring Oil Well Behaviour Challenges with ESPs**

- Review the challenges that were faced by TAQA on oil wells in the Netherlands and how well behaviour was causing difficulties with production
- Hear how completion modifications and engineering solutions were implemented to prevent oscillations and the impact they had on the ESP causing it to trip
- Hear how TNO and TAQA identified the root cause of the problems and prevented an escalation of issues as well as areas where modifications to handle gas should be installed

*Jordy de Boer, Technical Consultant Production Optimisation, **TNO***

**09:30 Increasing Efficient Recovery through Production Portfolio Services**

- Hear how Baker Hughes have worked with operators to implement proactive service campaigns that offer optimised production whilst controlling OPEX costs
- Review the selected technology, with a focus on effective chemical, pressure pumping and artificial lift solutions to illustrate how improvement in lift was achieved
- Examine the results of campaigns, highlighting why these technology solutions are a sustainable option for production enhancement in the North Sea

*Allan Loudon, Business Development Director, Baker Hughes*

**10:00 Efficiency through Simulation and Training Systems**

- Hear how you can obtain and maintain the last few percent of production efficiency through simulation and training tools
- Receive an overview of the lifecycle of a simulation model and the efficiency benefits that have been realised in best practise cases
- Assess case studies of Process System troubleshooting and optimisation, what is required in a fit for purpose system and how operators can benefit outside of projects

*Scott Smith, Skills Group Manager Operations and Technical Specialists, Genesis*

**10:30 Coffee Break in the Technology Showcase Hall****11:00 Holistic Approach to Sand Management – Unlocking Your Production Potential**

- Operators face some major challenges in the development of fields with sanding problems. Among those are predicting if, when and how much sand the wells will produce and how to manage sand production effectively
- Sand production, when unmanaged, can result in erosion of safety and production critical equipment in addition to reduced production rate and revenue or accumulation of solids in wellbore and production stop
- It is possible to maximize production from sand producing wells without compromising safety by integrating newest technology into your sand management strategy

*Neil Meldrum, Business Development Manager, FourPhase*

**11:30 Is The “Goldilocks” Completion Fact or Fairy Tale??**

- Hear how exciting new findings that document the benefit of near-well CFD models compared to conventional reservoir model representations could benefit well productivity and well clean-up predictions
- Understand how the geometry of wells is modelled and how Computational Fluid Dynamics is used for modelling fluid flow in reservoirs and wells
- Review the details of what a “Goldilocks” completion is and what the implications are for future wells

*Michael Byrne, Global Technical Head, Formation Damage, Lloyd's Register*

**12:00 Lunch in the Technology Showcase Hall**

**13:00 Optimizing Oil Production by Novel Technology Integration (OPTION) JIP Project Update – Coupling Reservoir and CFD Models**

- Get an update on OPTION JIP – a Joint Industry Project that involves DONG Energy, Welltec, Lloyd's Register, Technical University of Denmark and University of Copenhagen
- Hear how an interface between CFD-based well models and a conventional reservoir simulator is being set up and the benefits that the OPTION project sees from doing this
- Understand how existing reservoir models of producing fields can be improved to reflect the latest insights
- Debate how the new OPTION framework can help to unleash new well potential and how this could improve oil production in the North Sea

*Kenny Krogh Nielsen, Team Leader & Senior Principal Consultant, Fluid Dynamics, Lloyd's Register*

**13:30 Alternative ESP Deployment: Unlocking Field Potential**

- Assess latest downhole electrical wet-connector technology that allows standard ESPs to be 'shuttled' through tubing on wireline, coiled tubing or sucker rods and plugged into a downhole 'docking station' without the need of a rig or hoist
- Hear how you can replace ESPs conveniently and cheaply without a rig to minimise production deferment, operating cost, disruption to operations and safety/environmental risk
- Assess the latest field experience and rigless deployments to date to fully appreciate the potential of this revolutionary approach

*Eugene Bepalov, Domain Champion - Artificial Lift, Schlumberger*

**14:00 Planning and Monitoring Water Injection Efficiency to Optimise IOR**

- Review the current challenges and inefficiencies of water injection schemes (both seawater and produced water), including a focus on the cost, damage and integrity challenges that poor fluid targeting places on the reservoir and on other operations (in-fill drilling, P&A, etc.)
- Hear how intelligent, real-time injection monitoring can provide valuable insights into the performance of each well, from identifying the earliest signs of injection anomalies, to increasing production by ensuring that pressure support is optimized for each injector
- Examine how all injectors and producers in a field can be integrated to offer a real-time understanding of how all wells interact with each other at all times allowing a 'micro-mass balance' approach to production optimisation as distinct from the current 'macro-mass balance' approach

*Frederic Santarelli, Chief Technical Officer, Geomec Engineering*

**14:30 Financially Strengthening Business Operations in a Tough Economic Environment: A Maintenance Optimization Technology for Preventative Maintenance Optimization**

- Analyse the methodology developed by DNV GL for the Preventative Maintenance Optimization Framework
- Evaluate the benefits and the value to customers offered by the framework, which allows maintenance effort to be concentrated on areas that most affect production, rationalising PM tasks, instruction, and job plans where it provides less benefit, allowing the asset to return a lower OPEX
- Describe a Case Study applied to 3 assets for oil production of a North Sea Operator and how this will help decreasing maintenance OPEX, workload and backlog

*Andrea Monferini, Principal Consultant - Performance Forecasting and Maintenance Optimisation, DNV GL*

**15:00 End of Conference**