



Events

KOGT attends virtual conference for the first time

For the first time Kongsberg Oil & Gas Technologies participated in the Digital Oilfield Virtual Summit on 18 and 19 October. Hosted on a state-of-the-art virtual event platform, attendees were able to interact via integrated video chat, view keynote presentations and visit company booths without leaving their desks. The event explored visualisation technologies, data storage, infrastructure, enhanced collaboration in oil and gas and the role of data standards.

The KOGT booth included video clips, presentations and brochures of the group's offerings and for the duration of the conference KOGT welcomed over 100 visitors. Ben Lovell, who organised KOGT's attendance at the Digital Oilfield Summit, says, "Attending a conference of this kind can provide significant benefits. It helps to raise the profile of the range of products and services which KOGT provides across the globe, without the additional high costs

associated with taking exhibition space. We received great feedback from those who attended our booth and we'd certainly consider participating in this event again in the future."

Visit www.digitaloilfieldvirtual.com for more information.



Innovations

The official newsletter of Kongsberg Oil & Gas Technologies in the UK

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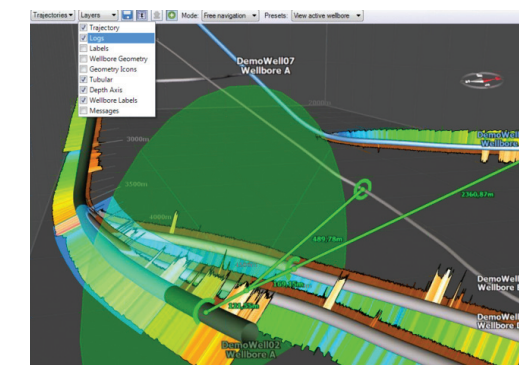
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Real-time data revolutionised with SiteCom®



professionals is paramount in the decision making process, and SiteCom® features technology which automatically verifies the accuracy and quality of the data before it is distributed. This feature gives users the security of knowing that they are not only accessing the latest information but also the best quality information.

Andy adds, "SiteCom® enables any number of users to view all available petrophysical, geophysical, geologic and drilling data generated on the rig in a multitude of ways depending on their function. It allows engineers and decision makers to view everything they need.

"It has shown to deliver real-time drilling data to users faster and more robustly than any other system, when trialled against leading competitors. Discovery Web also updates browser images faster than any other drilling visualisation tool on the market. This allows users to spend more time making decisions based on the data, rather than waiting for it."

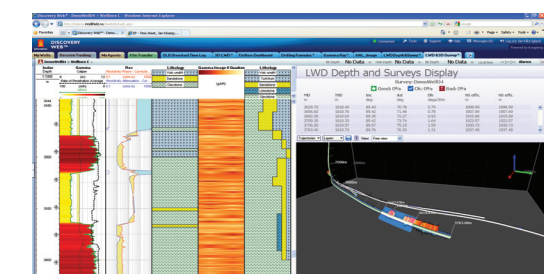
High-performance drilling operations depend on real-time information being made available to a community of professionals regardless of whether they are based in the office, on the drilling rig or in any number of remote locations across the globe. Current and relevant information is essential to allow these professionals to make high-level decisions on a daily basis – and thanks to SiteCom® that has become possible.

SiteCom® integrates real-time data, historical data, reports and files from all sources on the rig and makes them available through a single web-based interface – Discovery Web. This revolutionary technology enables all end users – no matter what time zone they are based in – to simultaneously access reliable information during operations on the rig.

Andy MacDonald, Sales Manager for UK and Europe for Intellifield Drilling Software, says, "SiteCom® allows users to establish a sophisticated, fully distributed, integrated environment to support drilling and well construction decisions. From this comes a wealth of benefits that improve the safety and efficiency of operations, environmental impact and bottom line.

"Data transfer using this system is secure, and has been configured so that data never needs to go outside of the clients' firewall. This gives end users full control of their assets at all times."

The quality of the data being utilised by



To support real-time decision making, SmartAgents are layered on top of the SiteCom® installation. These perform calculations which are required for better interpretation of events. This is carried out automatically in real-time and can determine fluid and rock parameters to assist with decisions on hydraulics, drilling parameters or pore pressures.

"Drilling in remote global locations is becoming more commonplace and the use of real time will bring significant benefits. It also means there is less dependency on domain experts being present at the rig site."

Did You Know?



The oil and gas industry currently employs **440,000** people. **340,000** focus on finding, developing and producing of our **own reserves**. **100,000** are occupied with supplying **goods and services to oil and gas provinces around the world**.

In 2010, **2.2 million barrels of oil** and gas equivalent (boe) per day were produced making the **UK the second largest oil producer** and third largest gas producer in Europe.

In the last 40 years, **£468 billion** has been spent with **£300 billion** invested in **exploration drilling and field developments** and **£186 billion** on **production operations**.

Get In Touch

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Welcome

Meeting the challenges faced by UKCS operators at Kongsberg Oil & Gas Technologies

Welcome to the winter edition of Innovations, a corporate newsletter produced by Kongsberg Oil & Gas Technologies (KOGT) UK – part of KONGSBERG Group.

As we rapidly approach the year end it is perhaps time to reflect a little on the past months. In March, the Chancellor's controversial increases in North Sea tax threatened several marginal field investments, while in October we witnessed the Prime Minister stressing the importance of energy security and praising the UK oil and gas industry for its continued and valued contribution to the economy.

Combine this fiscal policy uncertainty with increasingly technically challenging projects and the outlook could look a little gloomy. However, despite the mixed political messages, the technical challenges and associated commercial risks, there are very positive signs of a recovery in the UKCS. Recent North Sea investment announcements by BP with extensions to the Clair Ridge project and also Statoil reflect this growing confidence. The Statoil

Mariner and Bressay projects will result in a gross investment in the region of GBP 6 billion, with a potential requirement for up to 700 jobs in Aberdeen.

A rapid recovery will inevitably lead to a skills shortage and therefore potential cost inflation in the UK sector. Amongst the solutions is the need for more informed decision making during all stages of the life cycle from concept selection through to operations and life extension. This is where KOGT is making significant investments in the provision of high performance information technology solutions for drilling performance and production optimisation.

KOGT's activity in the UK currently provides real time drilling management services, along with production simulation, optimisation and reservoir visualisation services. A cornerstone of this is the provision of training on engineering simulators and in virtual environments to allow less experienced operators the chance to get to test scenarios and predict outcomes before going into a live situation.



Next year we will see the introduction of RigManager, a comprehensive software suite for drilling and rig management that will be supported by a domain specific management consulting service. KOGT will also develop its subsea technologies capability in the UK, offering engineering services and software products for flexible risers, umbilical and flowline management. Our goal is to meet the challenges faced by UKCS operators with optimised oil and gas operations, through collaborative data management, simulation and analysis tools, and innovative consultancy services – all leading to more informed decision making and improved operational and financial performance for our UK client base.

News

Sales Manager Appointed to Drive Forward Growth in European Markets



Kongsberg Oil & Gas Technologies (KOGT) has appointed Andy MacDonald to the post of Sales Manager for UK and Europe for IntelliField Drilling Software. Andy brings over 20 years experience within the oil and

gas industry and will be responsible for driving forward sales of KOGT's real time software solution, SiteCom® within European energy markets.

Prior to joining KOGT, Andy held account management and sales roles, within a number of different disciplines in the drilling sector, including wireline logging, directional surveying, drill bit technology, downhole rentals and explosives, both on and offshore.

Whilst working in the field, Andy was involved in the launch of Sakhalin Energy and Exxon Mobil projects on Sakhalin Island in Russia and led several unique contracts in remote parts of the globe. As Account Manager with Gyrodata, Andy was responsible for projects throughout Europe, Africa and Caspian and set up operations in Azerbaijan. He is highly experienced in managing the introduction and promotion of new products and brought Gyrodata's Gyro While Drilling (GWD) tool to the

Norwegian energy market. Mike Topp, Managing Director at KOGT says, "Major operators in the UK, Norway, the Middle East and more recently in Australia are already seeing the significant benefits that SiteCom® can deliver.

"SiteCom® integrates real-time data, historical data, reports and files from all sources and allows personnel to access this information from any location, whether that is on the rig, a remote office or another country. As a result, well-informed decisions can be made faster, thus enhancing safety, efficiency and profitability. Andy will be responsible for taking SiteCom® into the European markets, which we have identified as real growth areas for the business."

Career Profile

Attention to detail is essential in Graham Rayner West's role as Senior Process Engineer.



Name: Graham Rayner-West
Age: 57
Job title: Senior Process Engineer at Kongsberg Oil and Gas Technologies
Qualifications: B.Sc., AMIChemE

What the job involves:

I am currently the technical lead on BP Clair Ridge, a new production platform to the west of Shetland. My role involves producing FEED studies evaluating design alternatives, and Engineering studies supporting Hazop actions, evaluating start-up procedures and shut-down scenarios. The model we are working on will be developed into an Operator Training Simulator so that it becomes a lifetime asset for the platform.

News

KOGT spreads festive cheer

The season of goodwill will soon be upon us, and this year we have decided to help a worthy cause by sending an electronic Christmas greeting and making a donation in lieu of the cards we would have sent by more traditional methods.

We will be making a donation to Monty's Maggie's Appeal, which brings together

Getting there:

My first job was in process development and operations support with BP Chemicals in South Wales, and I then held a variety of positions with Esso Petroleum, Exxon Chemicals, BOC Process Plants and Fantoft. I was self employed for a period and was associated with several dynamic simulation companies conducting engineering studies on gas gathering projects for Shell Petroleum Development and the Terra Nova Alliance FPSO off Newfoundland. I took a career break for several years and worked as an IT Manager for a large law firm in West Sussex before returning to dynamic simulation this year as a Senior Process Engineer with KOGT.

I was looking forward to semi-retirement and spending more time sea-kayaking and walking the dog when the offer to re-join Kongsberg arose. Dynamic simulation is a very addictive occupation and the draw to work on exciting new projects was irresistible, so the kayak is firmly back on the weekend shelf. The dog still gets his walks, but has to get up earlier.

Interesting projects:

I worked as a commissioning manager for an Ultra High Purity Oxygen/Nitrogen plant in Japan. It was great to work with a Japanese team and witness the strong work ethic, attention to detail and drive to deliver on time, cost and quality. It was quite a challenge to find my way back to Osaka by train when surrounded by signs only in Kanji script!

I was also lucky enough to work in Italy with a multi-national Exxon team drawn from the US, UK, Italy, Belgium, Norway and Germany, interfacing with teams from AGIP and Foster Wheeler. It was a good opportunity to see different cultures of nationalities and companies, and to learn

the importance of clear and concise communication so as not to lose detail in interpretation.

Best bits:

There is a huge satisfaction in seeing a model come to life and mimic the real process and to see it respond to your actions. But more than that, it is very rewarding to see the lessons learned by running the model and to be able to demonstrate if features are good or indeed highlight issues or risks that need addressing before the design is finalised. The knowledge that there may be substantial paybacks, savings or safety/operability improvements to the client as a result is definitely the icing on the cake.

Worst bits:

In order for the model to be realistic, the fidelity must be high and this requires the model to be populated with accurate and consistent equipment data. In the early stages of a project, particularly FEED, much of this data is not yet firm or available and estimates have to be made in the knowledge that they may have to be re-visited several times in the future.

Advice to others:

You need a good eye for detail for model building, and there is no faster way of becoming familiar with an entire process than to start it up single-handed sat at your desk!

Most engineers now leave university having already been exposed to steady-state simulators. Like all software, so many people only use some of the features some of the time, but if you take time to exploit the power features to leverage extra benefits, you become expert and maybe start carving out a career path in dynamic simulation.

the Elizabeth Montgomery Foundation and Maggie's Cancer Caring Centres.

The charities have joined forces for an ambitious £3 million fund-raising campaign to bring a Maggie's Centre to Aberdeen. The centre, which will be located at the city's Foresterhill Hospital, will be used by families affected by cancer all over the North-east of Scotland.

**MONTY'S
MAGGIE'S
APPEAL**