BRENT E-NEWS

Brent Decommissioning Project

Welcome to the tenth in the series of regular communications from the Brent Decommissioning Project Team

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www.shell.co.uk/brentdecomm

Graphics, Media and Publication Services (Aberdeen) ITV/UDC: Ref. 021485 : December 2012

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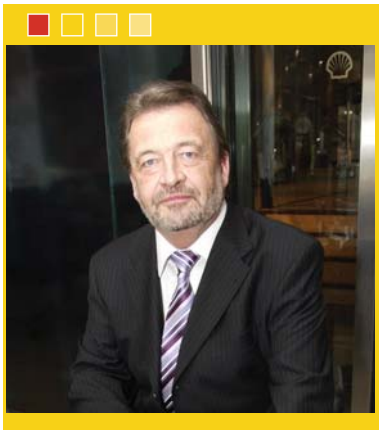
Project welcomes fresh faces and new technology

An update with Austin Hand, Project Director

We continue to make good progress towards our key objective of decommissioning the Brent field. As I have mentioned previously, this is a complex project which brings with it a degree of uncertainty. In tackling this uncertainty, taking the opportunity to understand more is always a benefit in the longer term, and inside this issue of E-news I expand on how and why we are doing this in certain key areas, without compromising our overall project objectives.



...I am delighted to welcome some new faces to the team.

With such a long-term project we can always anticipate a natural change-out of personnel and I am delighted to welcome some new faces to the team, in the key areas of Stakeholder Engagement and Health, Safety and Environment (HSE) Management, as well as to the Brent scientific Independent Review Group (IRG). Our new HSE Manager James Blackburn provides an update on our work with DNV on the Environmental Impact Assessment and Environmental Statement, and introduces the new IRG members, while Mark Downes, describes the focus of his new role as Stakeholder Manager, following Jim Niven's retirement.

On the technology front, I am delighted with the benefits of the pioneering Cyberhawk remotely operated aerial technology, which,as Project Delivery Manager John McQueenie explains, has recently enabled us to survey our Brent Delta facilities safely and effectively, saving considerable time and cost in the process.

As always, please contact us if you require any further information about any aspect of the project.

Austin Hand
BRENT DECOMMISSIONING PROJECT DIRECTOR

CONTACTUS

For further information on the Project, please visit www.shell.co.uk/brentdecomm or, you can also get in touch with the team via the '**Contact Us**' link on the website.

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Tackling uncertainties will bring long-term benefits

Deferment of the Decommissioning Programme explained

Project Director Austin Hand explains the deferment of the Brent Decommissioning Programme submission to the Department of Energy and Climate Change (DECC) and provides an update on key Project activities.

Recently we experienced unexpected challenges in the plugging and abandonment (P&A) of some of the Brent wells. This, together with the extended timeline now required to complete all P&A activities, has presented us with an opportunity to continue work to mature other parts of the Project.

In relation to securing a cell sediment sample, the completion of the manufacture and development testing for cell access along with surveying and sampling the drill stack and equipment has been slower and more difficult than anticipated. This has meant that we were unable to meet the 2012 weather window for offshore work to get a cell sample from one of the Brent Delta storage cells. We have therefore decided to defer this work to the summer of 2013, giving us the opportunity of another good weather window.

Given these uncertainties, the Project team and I believe it to be prudent and appropriate to defer our Decommissioning Programme submission. We also believe that resolution of these matters will support a more robust Decommissioning Programme and its passage through the regulatory process.

Deferment of these activities does not impact on the Project's overall long-term programme. Nevertheless, some short-term objectives will be deferred, including our planned 2012 Stakeholder events, which we now expect to take place during Q4 of 2013.

Meanwhile, a number of core activities remain well on track this year:

TENDERS: I am pleased to say that we have now received tenders for three key areas of the project; the contracts for the removal of the topsides structures, the onshore dismantling and disposal of the structures, and the conductor removals. The tenders are currently under evaluation and we are on target to award these contracts in the early part of 2013. This will enable us to secure the necessary resources well in advance - a key consideration in these highly-competitive and resource-constrained times.

STUDIES: All our major studies are now complete and undergoing review by the IRG, including the long-term modelling of the cell contents material and how that may affect the environment over the next 100 years. The cell survey results with a physical cell sample, now planned for next year, will further confirm and calibrate the long-term modelling which has already taken place.

WELLS PLUG & ABANDONMENT PROGRAMME: As I have mentioned, we continue to experience some challenges in this area; however it still remains firmly within the overall programme for decommissioning the Brent field. To support us in addressing the challenges of plugging and abandoning certain wells, we have introduced additional members to the IRG team (see HSE article) who have specialist knowledge in this particular field.

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A pivotal stage in HSE scoping and submission

Welcoming a new HSE Manager and IRG members

In July, the Project welcomed James Blackburn into the role of HSE Manager, following Gwyn Roberts' move to a new job in Shell.

With more than 20 years experience in the oil and gas and chemical industries, James joined Shell Australia in 2006 where he was based at the Clyde Refinery, New South Wales. He began an assignment back to the UK in 2009, as Assistant Unit Manager at the Stanlow Refinery, before joining Projects & Technology as Senior Consultant for Process Technical Safety (EMEA), covering Shell's Upstream, Downstream and Third Party businesses.

He joins the Brent Decommissioning Project at a pivotal stage: *"I'm coming in to a project where there's been a tremendous amount of HSE work carried out to date through the Concept and Define Stages. All the work that's been done in terms of scoping the Environmental Impact Assessment (EIA) is really coming to a head now and we've entered the final stages of detailing our scope and decision-making, where we are now preparing the Project's Environmental Statement (ES). The draft ES will inform a key part of our Brent Decommissioning Programme (DP) submission to DECC.*

As reported previously in Brent E-News, during 2010-11, independent environmental consultants DNV carried out the initial Environmental Scoping Report for Shell, which provided a detailed framework for the subsequent EIA. The EIA describes the environmental baseline of the Brent field and captures and assesses the short-to-long-term environmental and social impacts of decommissioning the field.

The EIA will inform the ES, which will also be drafted by DNV and - given the enormous scope of the Project - is likely to be a weighty document!" James explains: *"The ES will be extremely detailed - over 250 pages - and will cover a wide range of issues, in terms of hydrocarbons, waste production, energy consumption, noise, impact on shipping and fisheries, and also impact on onshore communities during and after decommissioning. In essence, the ES is a technical statement of how Shell plans to manage those impacts responsibly and effectively during the Execution phase, and it is central to Shell obtaining regulatory approval from the UK Government to start decommissioning."*

"The next year and a half will be a very exciting and challenging period. In addition to the DP preparations, Brent Delta continues to move towards the final stages of a programme of plugging and abandoning 150+ wells as well as busily preparing for moving to the execution phase. The effective interfacing between

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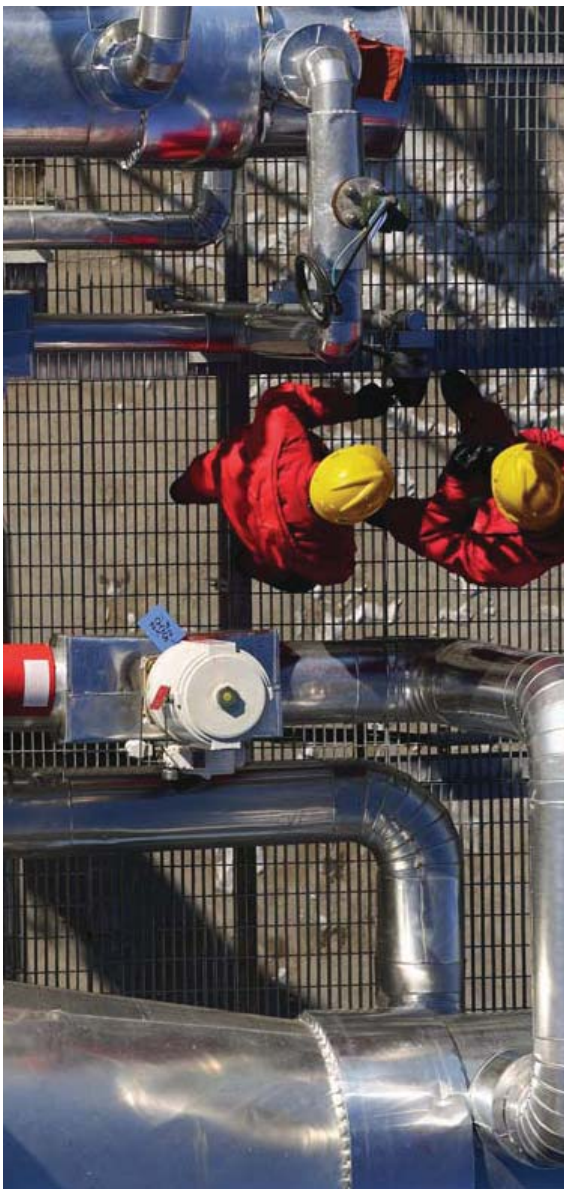
projects, operational assets, key contractors and regulatory bodies to ensure alignment of our HSSE goals is paramount. All in all, it's a great time to join possibly the largest offshore Decommissioning Project in the world!"



Project welcomes new IRG members

Three new members have joined the Brent Decommissioning IRG - the Independent Review Group of distinguished academics whose role is to conduct peer reviews of the many and varied Project studies.

Professors Quentin Fisher (University of Leeds), Ian Main (University of Edinburgh) and David Davies (Heriot-Watt University) will provide additional expertise in the specialist subsurface (below seabed) studies of reinjection of cell contents. The studies will include an examination of the integrity of existing wells and the potential to drill new wells from or adjacent to the platforms. This is just one option being explored on how to manage the cell sediment issue.

The augmented IRG will continue the independent scientific review process throughout Q1 and Q2 next year.

James Blackburn explains: *"We're very pleased to welcome the new members. The IRG provides peer review on the technical quality of the projects and studies commissioned by the Brent Decommissioning team and this is an evolving process. At different stages of the project our requirements may change with respect to the different specialist areas we cover, depending on the options we look at."*

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New Stakeholder Manager on board

Committed to ensuring stakeholders continue to be engaged and informed

In October, the Brent Decommissioning Project team said farewell and thank you to Stakeholder Manager Jim Niven, who retired following a successful international career with Shell which spanned 36 years.

Jim is succeeded by Mark Downes, who is no stranger to the project, having most recently been Upstream Commercial Regulatory Affairs Manager for Shell UK. Apart from UK specific responsibilities, Mark's role covered European Union issues, and he also chaired the Association of Oil and Gas Producers (OGP) Energy Strategy Task Force, which focuses on wide-ranging matters. This included the EU Commission's proposals on the Energy 2050 Roadmap, renewable energy sources and promoting the important role of gas and oil in the energy mix.

Prior to his career with Shell, Mark held a number of roles within the UK Government, including being a Private Secretary to a Government Minister and was latterly on secondment to Shell as a Stakeholder Advisor on the Sakhalin-2 Project in Russia where he worked in close liaison with environmental NGOs. Mark also sat on the Western Grey Whale Advisory Panel as an observer, acting as Shell's interface for NGOs to listen and understand environmental concerns relating to the Sakhalin II project.

Mark's main focus as Brent Decommissioning Stakeholder Manager will be to continue the Project's commitment to ensuring that stakeholders views are heard and they are kept informed on Shell's plans to carry out decommissioning in a safe and environmentally sound manner.

"Brent is a massive project that's extremely exciting and challenging, and it's vitally important that we get it right," he says. *"That is why we need to ensure our stakeholders have the opportunity to contribute and are kept abreast of what's happening throughout and that, wherever possible, we reflect stakeholder views in our Decommissioning Programme and our decision making process."*

"My aim is to continue the excellent job Jim has done to date, and I look forward to hearing the views and perspectives of our external stakeholders and to engage proactively with them, to ensure that when the Decommissioning Programme is open for formal public consultation, there are no surprises in there for anyone."

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New 'eye in the sky' inspection technology delivers safety and cost benefits

Cyberhawks award winning technology

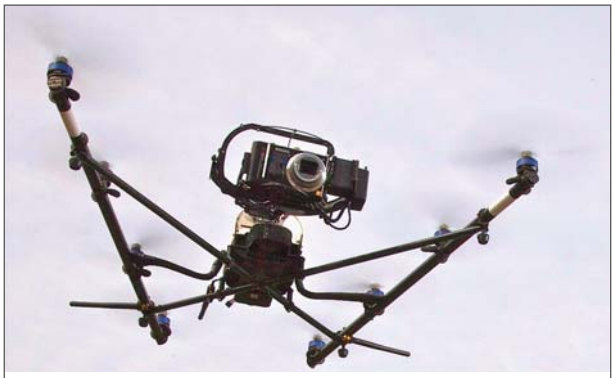
About Cyberhawk

Cyberhawk is the world leader in aerial inspection and surveying using Remotely Operated Aerial Vehicles (ROAVs) for close visual inspection of facilities such as live flare stacks, live transmission towers or carrying out topographic surveys from the air.

Designed to reduce costs, improve safety, save time and de-risk projects, Cyberhawk's cutting-edge ROAVs, Unmanned Aerial Vehicles (UAVs) and patented technologies offer detailed inspection reports containing high-resolution still and video imagery for close visual and thermal inspections.

Cyberhawk's clients include oil and gas, petrochemical and utility industry companies worldwide.

A novel 'drone chopper' inspection technique has not only delivered an unprecedented insight into the integrity of elements of the Brent Delta topsides, but has also had a positive impact on safety, timescale and costs.



Ever envied the person flying the remotely-operated helicopter in the park? Imagine flying one for a living, in the challenging North Sea environment!

Earlier this year, the Cyberhawk ROAV (Remote Operated Aerial Vehicle) – a metre-long, feather-light helicopter unit, complete with mounted camera and GPS – carried out a detailed structural and coating inspection of the drilling derrick on Brent Delta. Operated from the platform's helideck by skilled Cyberhawk technicians, the miniature chopper took high-resolution photographs of the derrick as part of a technical survey to assess the integrity of the facilities, prior to topsides removals. This knowledge will help to ensure that the removals are executed in a safe and controlled manner.

The exercise was highly successful. A traditional manual inspection survey of this kind would have required the drilling facilities to be taken out of commission for around three weeks. The Cyberhawk ROAV was able to carry out the inspection concurrent with well P&A activities. More importantly, it eliminated the need for four inspectors to carry out the work, which would have required significant use of rope access, thereby virtually eliminating any risk to safety.

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John McQueenie, Brent Project Delivery Manager (Stork Technical Services), explains an added benefit in using the new technology: *"The unit's GPS allows it to position itself at a certain point to take photographs and it records this position, so that for repeat inspections the ROAV can be sent back to exactly the same point to take another photograph. This means you can very accurately monitor and measure degradation of a particular component over a period of time."*

The next job for the drone was to carry out a potential dropped objects survey on the underside of the Brent Delta cellar deck, during the summer. Normally, this would have involved three or four technicians carrying out a three to four week survey using rope access. With the help of the Cyberhawk team the survey was carried out within eight days.

A big challenge in carrying out the under-deck work was that the location blocked the GPS signal. The unit had to be operated from four purpose-built scaffolding platforms erected on the under-deck, which gave the operators constant visual contact with the machine.

John says: *"That was the only drawback. On the plus side, we were able to use the very detailed photographic data supplied by the ROAV for a structural survey, as well as for the dropped objects survey. This means the structural engineers will be able to use that initial inspection to determine the condition of the structure and whether it will need any strengthening work prior to lifting the topsides from the legs. They are currently completing their report, but we can say, for example, that the survey showed some evidence of the damage from the exceptional "once in 200-year" waves experienced in the North Sea in 2000 and 2009, which would not have been possible to see – or revisit – under normal reporting circumstances."*

John continues: *"The Cyberhawk technology is first-class and has huge possibilities. I believe the next stage of development will allow the unit to transmit back to a base where engineers can look at an inspection real-time and influence how that inspection is carried out."*

In the meantime, the Project team plans to put Cyberhawk to good use on many more occasions throughout the Brent decommissioning project, particularly for the inspection of under-decks, drilling derricks and flare stacks.

OGUK Award Winning

At the 2012 Oil & Gas UK Awards which took place in November, Stork Technical Services together with Cyberhawk Innovations scooped the Oil & Gas UK Award for Business Efficiency.

The Oil & Gas UK Awards is the annual showcase event for the UK offshore oil and gas industry, which honours the top performing people and companies.

The Award for Business Efficiency was in recognition of the safety and cost improvements made in the way activities are executed on Brent Delta using this technology for the first time on an offshore installation.

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