

BRENT E-NEWS

SHELL BRENT FIELD DECOMMISSIONING PROJECT

ISSUE #17 DECEMBER 2016



IN THIS ISSUE...

A WORD FROM DUNCAN

A welcome from the Brent
Asset Manager

A WORD FROM ALISTAIR

An update from the Project Director

ICONIC MOMENT AS BRENT DELTA REACHES DE-MANNED STATUS AFTER ALMOST 40 YEARS

A key milestone for Brent
Decommissioning

ALL IN THE FAMILY: THE BRENT PIONEERS

Hear Lawson Petrie's Brent story

NASA'S ADVENTURE AT THE BOTTOM OF THE SEA

How Nasa used space technology
to solve a problem for Brent

BRENT TECHNOLOGY: INVESTING FOR THE FUTURE

Installation of a new crane on
Brent Alpha

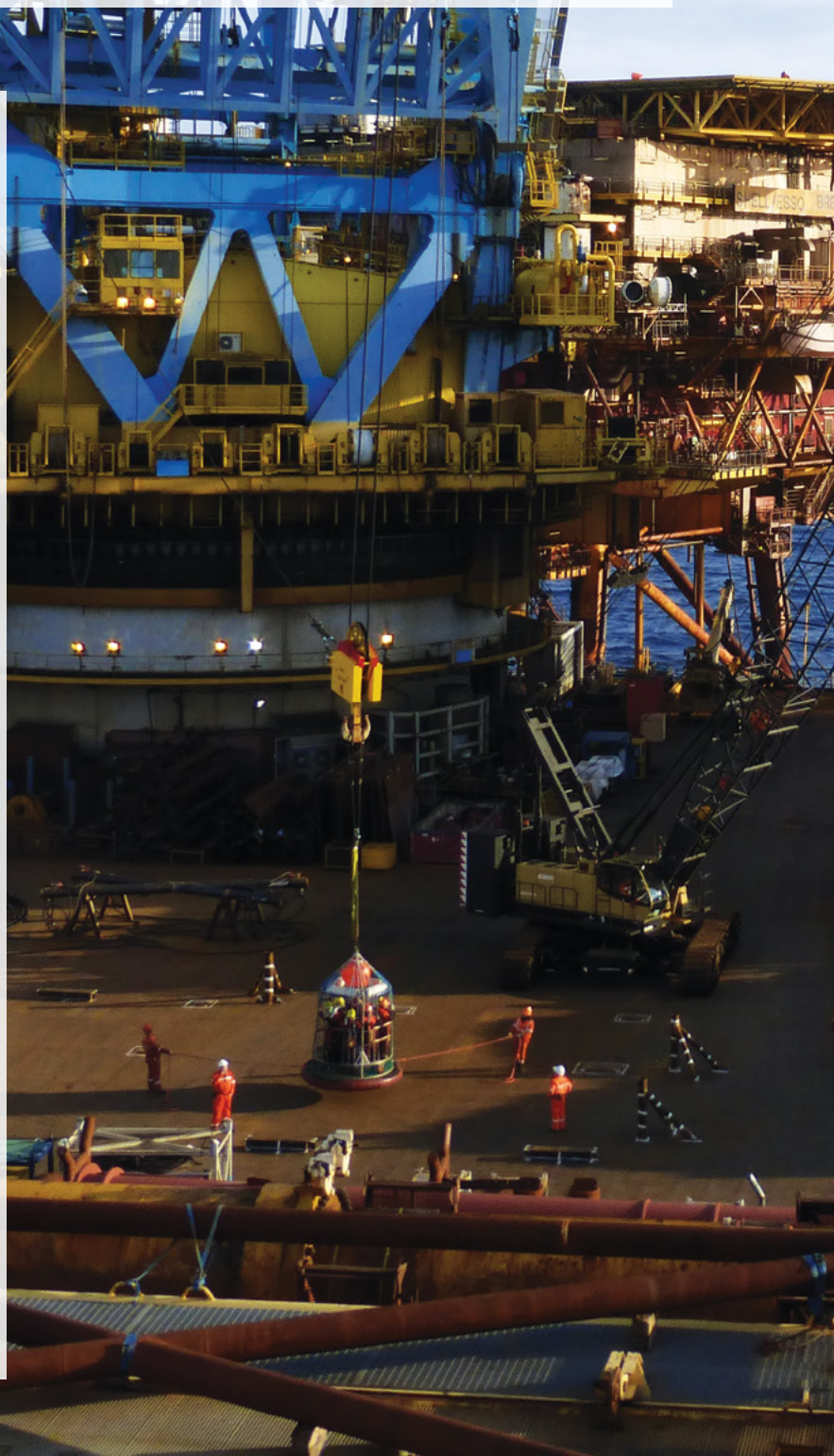
BRENT FIELD RECOMMENDATIONS

A look at the full suite of
recommendations for the Brent Field

PUBLIC CONSULTATION

The public consultation process
for Brent

www.shell.co.uk/brentdecomm



A WORD FROM DUNCAN



Welcome to issue 17 of Brent e-news.

In this e-news, you will be able to read about the recommendations that will be contained within our Decommissioning Programme (DP); our on and offshore activities over the last few months; and our upcoming public consultation process including details of how you can access the DP.

As many of you will know, we plan to submit our DP to the Department for Business, Energy and Industrial Strategy (BEIS) - formerly the Department of Energy and Climate Change - in the coming weeks. Ahead of this, and with our commitment to submit on a 'no-surprises' basis, the team has been engaging broadly to provide an update on our decommissioning plans.

Over the last few months, we have been travelling around the UK and mainland Europe meeting with many of you on a one-to-one basis to discuss our recommendations and to listen to your feedback. I have also had several engagements with the media to discuss the way that we plan to decommission the field - you may have seen some of this coverage in the UK, Dutch or German press.

In July, in partnership with the Institution of Mechanical Engineers (IMechE), we held two widely publicised talks in London and Aberdeen where we shared our recommendations and these attracted some media interest - you can read about the recommendations later in this issue of e-news.

My thanks go to the IMechE Chief Executive Stephen Tetlow and his team for their support with these talks.

During all our engagements we were asked many thought provoking questions about the project, our stakeholder consultation, and the role that the Independent Review Group (IRG) have played since 2007.

These, and all of the questions we have received, continue to help to frame our thinking and recommendations.

You can watch a recorded version of the full London IMechE talk and question and answer session on our [website here](#).

In addition to recording the session, we have placed great emphasis on sharing our activities in an easily accessible format and as such you may also find some of the following videos of interest:

- [Intro to Brent](#) - this is an introduction to decommissioning the Brent Field;
- [Comparative Assessment](#) - this explains the process and how it has been applied to Brent; and
- [How to Decommission Brent](#) - this details our decommissioning recommendations for the Brent Field.

As always, our Brent Decommissioning website is updated on a regular basis and is the best place to find information relating to the project. The most recent updates include information on our recommendations, new video content,

and image galleries. Finally, I would like to thank you for your continued interest and engagement in Brent Decommissioning, and for the support that you give by sharing your time, views, and feedback.

We will continue to share regular updates with ongoing activities, including the periodic updates that you receive via e-news.

I hope that you enjoy reading about our activities in this issue.

Duncan
Brent Asset Manager

A WORD FROM ALISTAIR

Summer has seen a tremendous volume of activity in the Brent Field culminating in Brent Delta being de-manned ahead of the platform topside lift in 2017.

You can read about the full de-manning operations later in this issue of e-news but in brief, this means that personnel completed their final shifts, turned everything off and left by helicopter one last time. The platform will now remain un-manned until the topside removal.

Two of our offshore team members took this poignant moment to retire after 36 years each working on Brent, almost the full time that the field has been operational. Another will join our onshore decommissioning team where he can utilise the many experiences gained in the field.

Prior to de-manning, the team worked tirelessly in their efforts to complete the many engineering activities ahead of leaving the platform.

These activities included various monitoring operations and studies both above and below deck; clearing works on deck to allow sufficient space to carry out all of the activities relating to the lift; prep work for installation of navigation aids and solar powered lighting equipment to assist mariners; sea fastening to ensure that the platform is safe for transit after the single lift; and finally, essential clearance operations ahead of leaving the platform ensuring that it is as orderly as possible

before being taken for recycling at the Able UK yard.

In this issue, you can read about the new crane that we have installed on Brent Alpha to assist us with our decommissioning activities. It may be surprising to read about adding new equipment to a platform that will soon be removed but the old crane was almost 40 years old.

The replacement crane gives us significantly improved performance; is safer to operate than a model nearly 40 years old; and we expect that it will be given a second life elsewhere once it is removed from the Alpha topside in the future.

Finally, the team have been hard at work with NASA to access the concrete storage cells at the bottom of the gravity base structures for sonar mapping – a partnership that stretches back to 2013. The team successfully accessed the Brent Bravo cells using technology previously developed for the space shuttle programme.

You can read more about this exciting programme of work in this issue of Brent e-news.

Alistair
Project Director



“PRIOR TO DE-MANNING, THE TEAM WORKED TIRELESSLY IN THEIR EFFORTS TO COMPLETE THE MANY ENGINEERING ACTIVITIES AHEAD OF LEAVING THE PLATFORM”



Brent Delta being de-manned

CONTACT US

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.



ICONIC MOMENT AS BRENT DELTA REACHES DE-MANNED STATUS AFTER ALMOST 40 YEARS

Marking the beginning of the end of an era for the Brent Field, Sunday afternoon, July 17, 2016 was an historic moment on Brent Delta, when the last 19 crew left the platform.

Robert Cullen, Offshore Installation Manager and one of the last on the platform said: "The successful de-manning of the Brent Delta was a real highlight of my offshore career. To leave a platform after it had been continuously manned for nearly 40 years was a very complex operation which required meticulous planning. Fortunately, we had a dedicated on and offshore team who worked together to ensure it was carried out safely and efficiently. The execution of the operation went to plan and witnessing the platform finally fall silent was an emotional moment for the team on-board."

"As we waited under the helideck for the final Brent Delta crew departure we saw a whale breaching nearby – an amazing sight which was more apparent and impressive given the stillness of the platform without equipment operating. As the helicopter lifted off and we looked back at the platform, there was a real sense of achievement amongst the team but also poignancy as we knew we would not be coming back". Robert now joins the onshore

decommissioning team in Tullis, taking his frontline experience and focussing on Improvement Opportunities for the other Brent Platforms.

Operationally there has been extensive activity to complete essential work in preparation for the final de-manning of the Delta platform this summer including the addition of shear restraints inside the legs; extensive welding and strengthening; and underdeck work including the removal of scaffolding.

Project Director Alistair Hope said: "I am delighted with the progress the Project has made in the last few months. Everyone has been working extremely hard to ensure the work scopes have been safely completed for de-manning, ahead of the topside lift in 2017."

The submission of the Decommissioning Programme to the Regulator will see the start of the next chapter of the Brent story, which reaches its 40th anniversary of first production in November 2016. Brent Charlie is still in production, and decommissioning is anticipated to take another decade, due to the size, complexity and location of the field's infrastructure 186 km north-east of Shetland.

Brents Alpha, Bravo and Charlie will

remain manned for the foreseeable future as decommissioning work is carried out across the field.

For further information, please visit our [website](#).

DE-MANNING AND UNMANNED STRUCTURES

De-manning is the process of removing all crew and personnel from a platform. Delta will remain in this 'lighthouse' mode until the single lift vessel removes the topside in 2017.

The decision to leave Delta unmanned is a safer option than keeping personnel on board once it has been prepared for the lift, this has been common practise in the North Sea for many years. De-manning was introduced to reduce the ongoing risk exposure to offshore personnel, as operators recognise the benefits offered in terms of safety. There are recent examples of platforms being decommissioned that have been left unmanned for some time prior to decommissioning activities, including North West Hutton and Murchison.



ALL IN THE FAMILY: THE BRENT PIONEERS

Forty years after the huge Brent oil and gas field started operations, one family's story reflects its history...and the birth of a new industry

Back in the 1970s, Lawson Petrie was working on one of the biggest and most complex engineering projects of his time: the construction of one of four vast platforms in the Brent oil and gas field in the North Sea.

"We were pioneers," says Lawson today of his work building Brent Charlie, which stands as tall as the Eiffel Tower. "We had to think on our feet and find our own way forward. It was like building a huge Lego set for the first time."

Lawson went on to spend most of his career working on the Shell-operated Brent platforms in the outer reaches of the North Sea. His different roles tracked the life cycle of a field that since 1976 has produced around 10% of the UK's oil and gas and around £20 billion in tax revenue.

Lawson retired at the end of 2015. But his youngest son Nairn followed in his footsteps, working for Brent's project design team in Aberdeen. Nairn is a pioneer of a different kind. He helps to shape the final stage of the Brent cycle – the decommissioning of the Alpha, Bravo, Charlie and Delta platforms.

"Brent will be the biggest decommissioning project in the North Sea in terms of effort and scale, which makes it unique," says Alex Kemp, Professor of Petroleum Economics at the University of Aberdeen. "This knowledge will help oil and gas companies around the world, from the Gulf of Mexico to Australia's Bass Strait." Decommissioning in the UK Continental

Shelf alone could cost the industry up to £45 billion pounds in the period to 2050, according to Kemp's estimates, creating many new business and career opportunities. Aberdeen University, for example, plans to offer the world's first Master's degree in decommissioning in 2017.

"I may be sitting at a desk all day but I feel the aura of the Brent legacy," says Nairn, 34, in the family's home in a quiet residential district in the Scottish city of Dundee.

His father adds: "I'm proud that my lad will be working on dismantling this huge beast that I helped build. It's about time for it to retire."

Family traditions

Growing up in Dundee, Lawson expected to follow the family tradition of shipbuilding. His father had worked as a rigger in the local shipyard. His grandfather drilled holes for the rivets holding together the steel plates of battleships.

At 16 years old, Lawson started work as an apprentice designer in a local shipyard. But it was the beginning of the UK's energy boom and he soon saw opportunities in the oil and gas industry.

In 1978, Lawson joined Shell as a design engineer. By 1985, he was the resident engineer for the Brent field. But the highlight of his career was working as the main project engineer on the redevelopment of the Brent Charlie platform in the mid-1990s, helping to extend its life beyond the expected 25 years.

"It was the biggest offshore brownfield project in the world at the time and it effectively turned an oil field into a gas field," says Lawson.

Tough conditions

The redevelopment of the Brent Charlie platform lasted three years. Lawson worked in two-week shifts. He lived offshore during huge storms that could last for days, including one memorable time when the platform was hit by a 30-metre wave. "We had to stay locked in as this huge structure shifted in the storm. I still remember that shunting sensation," Lawson says. The work was often hard and physically demanding. Lawson remembers inspecting equipment in Charlie's concrete legs. He would climb down a vertical ladder for about 10 minutes carrying a radio, a gas detector and breathing apparatus in case of an emergency. It was noisy and hot.

The family found a routine but felt Lawson's absences. At one time, Nairn worried his parents would separate because Lawson spent so much time offshore. "I drew a portrait of myself and slipped it into his bag so that he wouldn't forget me," he recalls.

It took some time for Nairn to follow in his father's footsteps. After leaving university, he managed a local sports shop. Then, Lawson encouraged him to apply for a role in Shell's design team.

"Working in retail is all about budgets," says Nairn, who is Lead Engineer for Cost Control for the Brent decommissioning project. "I took that experience and brought it to Shell." Most recently, Nairn and the rest of the design team helped Shell decide on its recommendations to the UK government for removing all four of the Brent platforms' topsides, the part visible above water.

The government has already approved the lifting of the Brent Delta topside in a single block.

Lawson is impressed. "When we were building Brent, I always imagined that it would be dismantled piece by piece," he says. "It's amazing to think that one vessel can lift the whole structure. That's Star Trek territory."

Story by Jo Wrighton



NASA'S ADVENTURE AT THE BOTTOM OF THE SEA

It took an abandoned nuclear missile silo, a vast underwater laboratory and a lot of hard work. But the US space agency boldly went where it had never been before: the North Sea.

Growing up just a few miles from the Johnson Space Center in Houston, USA, Darby Magruder dreamed of living in space.

He became an engineer, joined Nasa and worked alongside astronauts. But he came closest to his dream when he took some space shuttle technology and made it work, against the odds, in the cold, dark depths of the UK's North Sea.

And it only happened because of three vast concrete structures that, for the last 40 years or so, have been providing a solid base for a trio of oil and gas platforms off the coast of Scotland. The Shell-operated Brent Bravo, Brent Charlie and Brent Delta platforms were put into position in the 1970s: each one weighing more than 300,000 tonnes and as tall as the Eiffel Tower.

"THE ATTENTION TO SAFETY WAS REALLY STRONG, VERY SIMILAR TO NASA"

At the bottom of the structures are 64 hollow concrete tanks that have been used to store oil and help anchor the platforms.

With the Brent field stopping production, decisions had to be made about what to do with the structures. Shell needed to find out more about the sediment at the bottom of those vessels.

"There was a plan to drill through the top of the vessels," remembers Roddy MacFarlane, who works on Shell's Brent decommissioning team, "but they are at the bottom of the sea and are made of metre-thick reinforced concrete. Drilling through was going to be difficult and risky."

A group of Shell staff who meet in their own time to hunt out solutions to the company's biggest challenges – the Hunter Network – thought Nasa might have the expertise to send a probe through the existing 10-inch network of pipes.

And that's where Magruder came in. "As soon as Shell told me the challenge I thought about our AERCam – something



Nasa's Darby Magruder always dreamed of living in space

we invented to float around the Space Shuttle to inspect it without having to do spacewalks," says Magruder, who is Deputy Chief of Robotic Systems Technology at the Johnson Space Center. He took time away from some of his Nasa projects – which include building humanoid robots to set up a base on Mars – and got to work making a bowling ball-sized scanning device that could get through the Brent pipes.

Building the probe

It needed lights, cameras, control systems and, of course, sonar. And it had to be gold-coloured, a reference back to the Apollo missions.

Nasa built a replica of the Brent pipe system in its Neutral Buoyancy Lab – a vast swimming pool used to simulate the weightless conditions in space – to test that the 'Sonar Sphere' prototype worked. It did.

But Magruder also wanted to see if it could scan effectively inside the vessel. So he found an abandoned US nuclear missile silo.

Continued on the next page >

NASA'S ADVENTURE AT THE BOTTOM OF THE SEA CONTINUED

"One of my colleagues is a diver and he knew of this silo, which is largely flooded, in Texas," said Magruder. "It is almost exactly the same shape and size as the Brent vessels. So we tested the probe there too."

But despite all the preparation, the North Sea had some surprises in store. On the first attempt, the tether attached to the probe snapped. On the second, the probe got through the pipe but wouldn't go into the vessel itself. And on the next attempt, the probe struggled to see through a layer of mixed oil and water.

The fourth attempt was different.

To get access to the pipes Magruder had to climb down inside one of the legs supporting Brent Bravo. He worked in a room 71 metres under the surface.

"We had breathing gear on and special suits, we were weighed down with so much stuff and monitoring equipment," recalls Magruder. "The attention to safety was really strong, very similar to Nasa."

"To get into position we even had to go through a huge blast door. It was cold too. It was just like being an astronaut. I loved it." Once the probe got in and data started coming through, Magruder cried tears of joy.

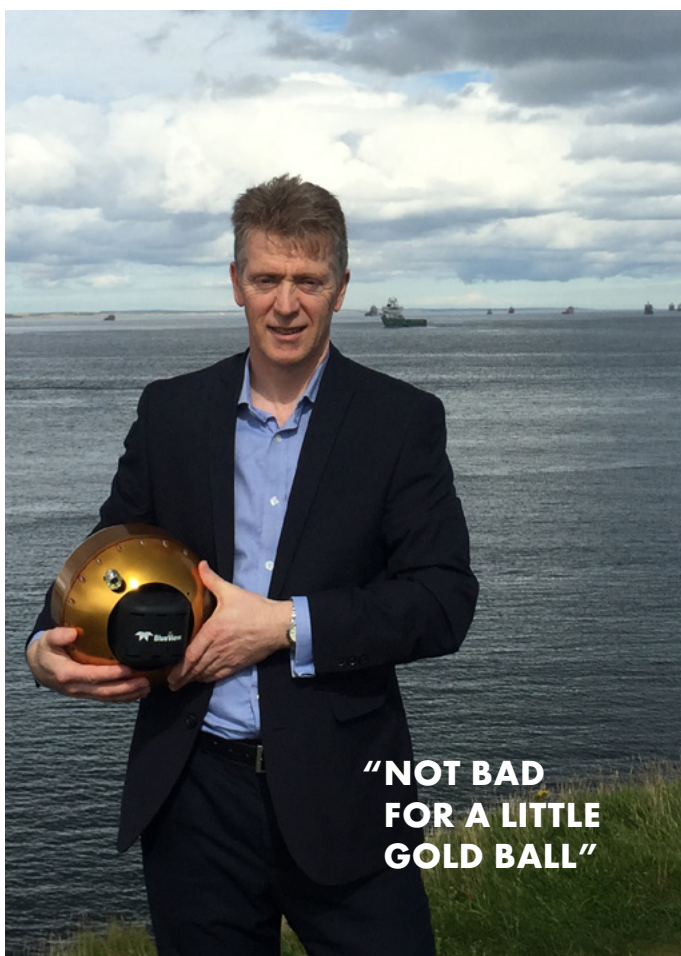
Back on shore, MacFarlane punched the air in celebration. The probe went on to produce a detailed map of the amount and distribution of sediment in the vessel. Another technique, developed by a separate team, was used to get a sample of the sediment so its composition could be analysed.

With the project now nearing its end, Magruder has hopes the Sonar Sphere could find another use: back up in space.

"We are looking at dragging an asteroid into the Moon's orbit to investigate it," he says. "With a little modification, the Sonar Sphere could be at the forefront of space exploration, telling us what the asteroid is made from."

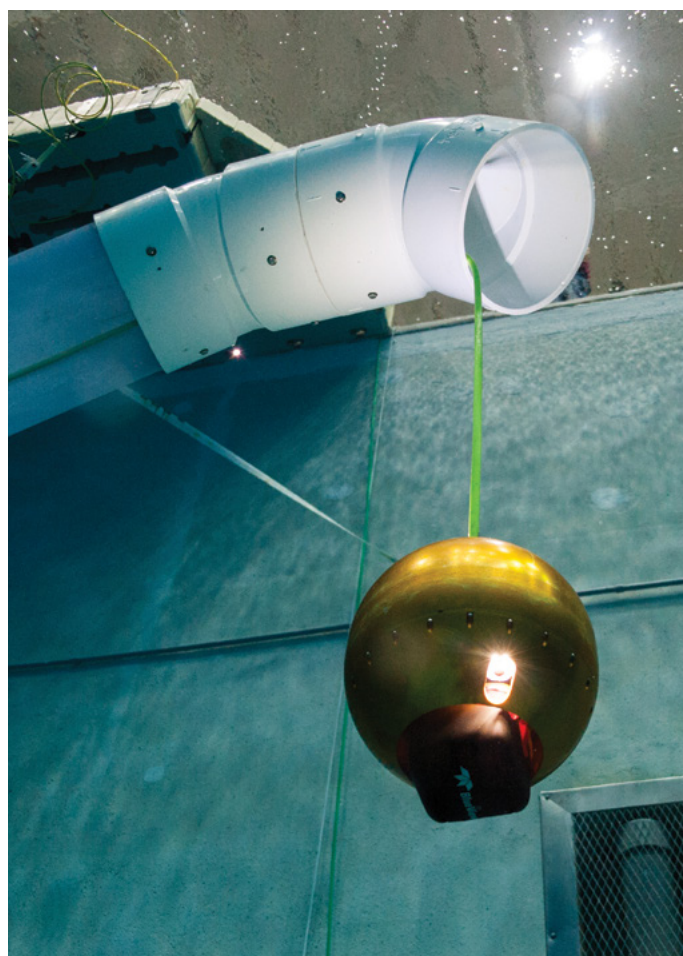
Not bad for a little gold ball.

Story by Lech Mintowt-Czyz



**"NOT BAD
FOR A LITTLE
GOLD BALL"**

Shell's Roddy MacFarlane holding the Sonar Sphere probe





BRENT TECHNOLOGY: INVESTING FOR THE FUTURE

In line with Shell's commitment to support safe and efficient decommissioning activities, the Brent Decommissioning team review operational activities for continuous improvements.

One such efficiency identified was the need to install a new crane on Brent Alpha, which ceased production in 2014. The new crane would improve efficiencies, saving time and costs.

A significant proportion of the total cost of any decommissioning programme is driven by the plugging and making safe of the wells. For Brent this constitutes roughly 40% of the total decommissioning cost. Key to a safe and efficient wells operation is the ability to reliably manoeuvre equipment for which platform cranes are essential. The need for a new crane on Brent Alpha reflects the fact that as infrastructure ages, investment in technology to improve efficiencies, time and cost is essential.

A substantial heavy lift programme to replace the old east crane on the Brent

Alpha platform was successfully completed in less than two days, in late June 2016. Having been in service for several decades, the crane had become limited in its operability and availability, which was impacting the efficient execution of the essential plug and make safe campaign, ahead of decommissioning the topside, jacket and infrastructure.

Project Manager Pieter Hendriks said: "At first it seemed counter-intuitive to be investing in new equipment for a platform that is due to be decommissioned, so we worked with a team of consultants from predictive simulation specialists 'Lanner' to create a model. This was aimed at improving our understanding of inter-related parameters such as deck space, crane availability and logistics. The model compared a number of scenarios to establish the constraints, threat to timescales, and the opportunities for maximising operational efficiencies.

"When we reviewed the crane's capabilities, and combined that with the study of the optimum use of the deck space required for

laying down pipes and reclaimed materials, replacing and upgrading the crane made sound business sense".

Planning started in 2015, and Dutch company Kenz Figee were awarded the contract to supply the new crane, customised to Shell's requirements for Alpha. In Q1 2016 Saipem Ltd were contracted to manage the heavy lift, and the work scopes included collecting the crane from Kenz, transporting it to the Brent Field, removing the old crane and pedestal, fitting the new pedestal and removing a large additional compression train module (ACTM) from the deck to free up much needed space.

After the vessel arrived at Alpha, the entire work programme was completed in just one and half days. "The careful, detailed planning, and efficient execution by the contractors, meant that the new Alpha crane was in place and ready for commissioning with minimum disruption to operations," said Hendriks, "and the new crane is now ready to optimise the well campaign."



BRENT FIELD RECOMMENDATIONS

The Brent oil and gas field lies off the north-east coast of Scotland, midway between the Shetland Islands and Norway. It is one of the largest fields in the North Sea and has four large platforms called Alpha, Bravo, Charlie and Delta.

When the Brent Field was discovered in 1971, it was one of the most significant oil and gas finds made in the UK sector of the North Sea. It helped to keep the lights on when energy was in short supply during the energy crisis of the 1970s.

Brent has been a cornerstone of the UK's hugely successful oil and gas industry for 40 years. Over its lifetime, it has created and sustained thousands of jobs, contributed more than £20 billion in tax revenue, and provided the UK with a substantial amount of its oil and gas. At its peak in 1982 the field was

producing more than half a million barrels a day.

Its production that year would have met the annual energy needs of around half of all UK homes. At the time of its discovery, the expected life span of the field was 25 years. Continuous investment and a redevelopment in the 1990s by the field's equal partners, Shell U.K. Limited (Shell) and Esso Exploration and Production UK Limited (Esso), extended the life of the field well beyond its original expectations. The 40th anniversary of production is in November 2016.

Retiring Brent

Now, after many years of service to the UK, the Brent Field has reached the stage where almost all the economically recoverable reserves of oil and gas have been extracted. The next step

“BRENT HAS BEEN A CORNERSTONE OF THE UK’S HUGEY SUCCESSFUL OIL AND GAS INDUSTRY FOR 40 YEARS”

in the life cycle of Brent is to retire or “decommission” the field’s four platforms and their related infrastructure.

This is a complex, major engineering project and is likely to take another decade to complete. It follows the decommissioning of other operators’ platforms in the North Sea, with around 40 programmes submitted to the Department for Business, Energy and Industrial Strategy (BEIS) so far.

Continued on the next page >

BRENT FIELD RECOMMENDATIONS CONTINUED

However, decommissioning the Brent Field does not signal the end of the UK's oil and gas production. Industry body Oil and Gas UK estimated in 2016 that there are up to 20 billion barrels of oil and gas still to recover from the UK sector of the North Sea.

Regulation for decommissioning

Decommissioning follows a tightly-defined regulatory process. We are currently preparing the following activities in line with UK regulations: plugging and making safe all the wells; removing the topsides from all four platforms; recovering seabed debris; and removing the 'attic oil', which is located at the top of some of the subsea storage tanks or 'cells'. Some activities require the use of a [Comparative Assessment \(CA\)](#), a detailed process which weighs up the pros and cons of each option against defined criteria. We must then submit our final recommendations to the regulator and enter a period of public consultation – you can read more about this process later in this issue of e-news.

Our task has been to find a way to carry out the work that will ensure safety of people on the project and other users of the sea; have minimal impact on the environment now and in the future; be technically feasible; economically responsible and consider the impact on affected communities. The final recommendations are the result of ten years of internal and independent studies, the completion of the comparative assessment process, and ongoing discussions with the regulator. Since 2007, we have engaged with hundreds of organisations and individuals in the UK and in mainland Europe. The discussions have enabled stakeholders to share their views and concerns, which we have taken into account when assessing different options.

Stakeholder engagement

During July, the project updated stakeholders on the recommendations for the field through two public lectures hosted in conjunction with the Institution

of Mechanical Engineers (IMechE) in London and Aberdeen. A recording of the IMechE, Brent Decommissioning – Next Steps is available for you to watch [here](#).

"We have held around thirty one-to-one meetings with stakeholders since April, to present the emerging recommendations for decommissioning the Brent Field," said Project Director Alistair Hope: "and followed up with two very well-supported public events in early July, in partnership with the IMechE. Over 350 external stakeholders attended the engagements in London and Aberdeen."

"ARRIVING AT THE RECOMMENDATIONS HAS BEEN A LONG PROCESS," SAID HOPE. "THEY ARE THE RESULT OF MANY YEARS OF RESEARCH, INVOLVING ENGINEERING STUDIES, EXPERT INPUT, SCIENTIFIC ASSESSMENTS, CONSULTATION AND RIGOROUS REVIEW"

Brent Field recommendations

We will make the following recommendations to BEIS. Where removal is considered unsafe, too technically challenging or economically unviable, we will recommend leaving structures in place.

Brent Alpha footings. The Brent Alpha steel jacket platform weighs around 31,500 tonnes and is the structure that supports the topside and anchors it to the seabed. The upper portion (down to 85 metres below sea level) of the steel jacket will be removed. The recommendation is to leave in place the lower portion, or 'footings', due to engineering challenges,

disproportionate costs, safety risks and broader concerns associated with their removal.

Gravity Base Structures (GBS). The other three Brent platforms are GBS supported by giant concrete legs. Each structure which supports the topsides above the surface of the sea weighs 300,000 tonnes, roughly the same as the Empire State Building. We have analysed a long list of options for the GBS such as re-floating, partial removal or leaving them in place. Our recommendation is that the safest and most responsible solution is to leave the GBS legs and oil storage cells in place, marked with navigation aids so they are recognisable to shipping, fishermen and other users of the sea.

Cell contents. There are 64 storage tanks or 'cells' in the Brent Field which sit around the legs anchoring the GBSs to the seabed. Around two thirds have been used for oil storage and separation. They contain a layer of sediment at the bottom of each cell; this is a mixture of oil, sand particles and water. Our recommendation is to leave the cell contents in place, undisturbed. The technical difficulties, safety issues and cost of removal, along with treatment and disposal, would be disproportionate to any benefits of removal. The studies show that leaving the cell contents in place presents a low environmental hazard.

Drill cuttings. Drill cuttings are shards of rock which are produced when a well is drilled. Until the 1990s, the discharge of cuttings to the seabed was legally permitted and an established operational practice. The removal of drill cuttings is recognised as an major and costly operation as it would result in disturbance to the cuttings and release of associated hydrocarbons into the marine environment. Leaving the drill cuttings in situ is a permitted derogation of the removal requirements under OSPAR. The recommendation is to leave the drill cuttings in place to degrade naturally rather than disturbing them.

Continued on the next page >

Pipelines. There are currently 28 pipelines in the Brent Field used for exporting oil and gas to the mainland and for connections between fields. The recommendations for their decommissioning range from full removal of some pipelines to leaving others in place.

These recommendations are consistent with plans that have been submitted by other operators, such as ConocoPhillips' Ekofisk platform and Total's Frigg platform, and approved by the relevant authorities. We are confident that our proposals are safe, technically achievable, financially and socially responsible, and environmentally sound.

"Arriving at the recommendations has been a long process," said Hope. "They are the result of many years of research, involving engineering studies, expert

input, scientific assessments, consultation and rigorous review. An Independent Review Group of eminent scientists has commented on over 300 studies commissioned since the beginning of the Project in 2006."

What next?

As operator of the Brent Field, we are required to submit a formal Decommissioning Programme to BEIS. At the request of stakeholders, Shell has doubled the public consultation process from the standard 30 days, to 60 days to enable people to fully review the documentation. Following the public consultation process, and provided we have addressed to their satisfaction all of the comments and questions received, BEIS will apply to the OSPAR convention on Shell's behalf for an exemption to leave those structures and materials described above in place.

FIND OUT MORE...

- Get an overview of Brent Decommissioning in ten minutes, [watch this video](#).
- Watch a video of our [IMechE Brent Decommissioning – next steps stakeholder event](#) and Q&A session.
- Read our [project brochure](#) outlining the recommendations for the Brent Field.
- Find out more about the [Brent field, the decommissioning plans](#) and our stakeholder engagement.

OSPAR

OSPAR is the international organisation by which 15 governments and the EU cooperate to protect the marine environment of the North-East Atlantic. OSPAR recognises that there may be particular difficulties and risks associated with removing some structures and platforms so it provides for a case to be made for exemption, or 'derogation', from the general rule of complete removal.

To date, at an industry level, five Gravity Base Structures (GBSs) have been decommissioned in the North Sea. All five structures have been granted derogations and left in place.



PUBLIC CONSULTATION

The Brent Field Decommissioning Programmes (DP) will cover the whole Brent Field and associated pipeline systems.

To make the DP more accessible and manageable to review, the DP will be supported by a number of Technical Documents (TD) that will also contain details of the Comparative Assessments (CA) carried out for each of the structures, pipelines and materials that are to be subject to the key decisions.

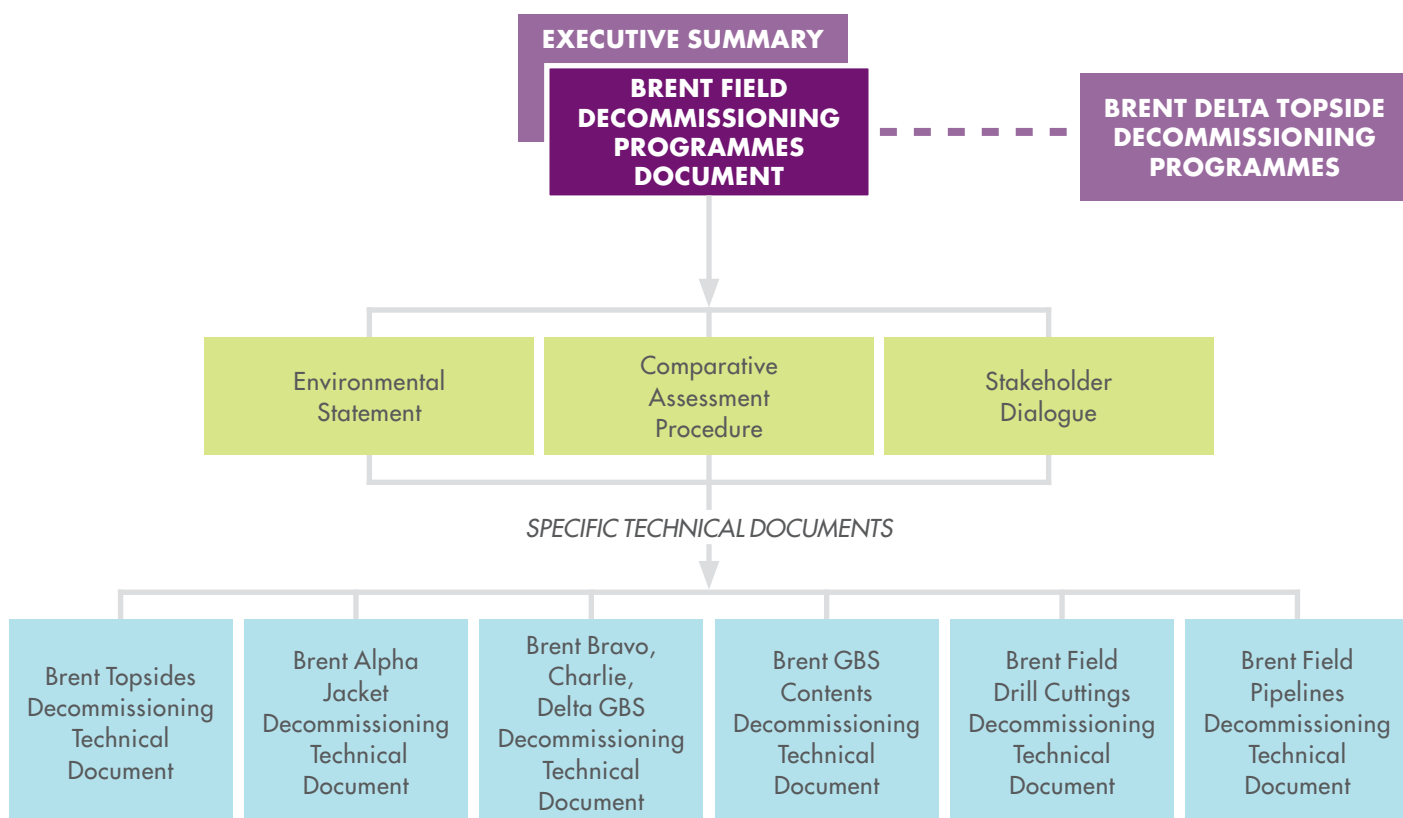
An Environmental Statement and a separate stakeholder report will further supplement the DP.

At the request of stakeholders, we have decided to double the statutory consultation period from 30 days to 60 days – this will allow additional time to review the extensive documentation which has been prepared as a result of the studies, engagements, review and evaluation processes conducted over the last decade.

The DP will be updated as appropriate and re-submitted to BEIS ahead of all necessary derogations. For further information on the Brent Field recommendations or derogations, please refer to our [website](#).

To discuss any aspect of Brent public consultation, please contact the team on Brentinfo@shell.com.

STEP 1 – ANNOUNCE	As formal consultation commences, we will announce the proposals by placing adverts in national and local newspapers, and journals. An email will be sent to all stakeholders in our database. If you would like to be added to this list, please contact a member of the External Relations team or email us at Brentinfo@shell.com .
STEP 2 – VIEW THE MATERIALS	Materials can be viewed in a number of ways: Online: either via the Department for Business, Energy and Industrial Strategy (BEIS) or our Brent Decommissioning websites. Hard copy: a copy of the DP will be available to view at the Shell office in Aberdeen (by appointment) and in Aberdeen Central Library.
STEP 3 – COMMENT	Comments can be emailed to Brentinfo@shell.com .
STEP 4 – CLOSE OUT	All comments received prior to the Consultation deadline will be reviewed and incorporated into the DP material as appropriate, ahead of resubmitting it to BEIS ready for OSPAR Consultation.





CONTACT US

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.