

Gohta appraisal comes up dry

Lundin Petroleum is gearing up to complete appraisal well 7120/1-5 on the oil and gas discovery well 7120/1-3 (Gohta) in Production Licence 492 (PL 492) offshore Norway as a dry hole.

The well was drilled around 4km north of the discovery well and around 3km east of appraisal well 7120/1-4 S, which was drilled in 2014. The latest well also lies around 17km southwest of discovery well 7220/11-1 (Alta).

The well was drilled by the *Leiv Eiriksson* drilling facility, which will now proceed to drill appraisal well 7220/11-4 in PL 609 in the Barents Sea, where Lundin Norway is the operator.

EUROPEAN OFFSHORE PETROLEUM NEWSLETTER

Vol. 42 No 17

3 May 2017

Maria 1H 2018 start-up possible

Germany's Wintershall is so pleased with progress on the **Maria** field development offshore Norway that the operator says the project could come onstream ahead of schedule in the first half of 2018.

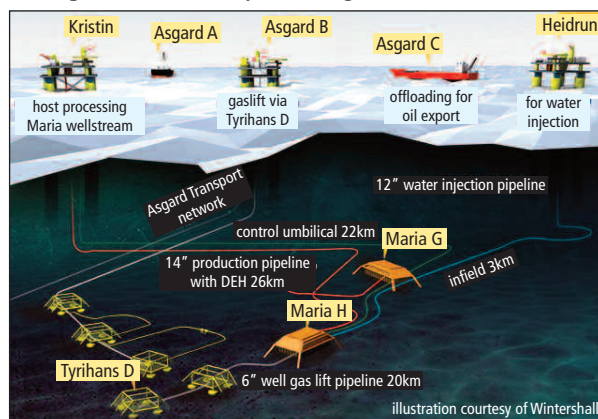
"The Maria project has so far had very good progress. If this continues, a startup in the first half of 2018 could be possible. With the drilling of the reservoir, we will be passing another critical milestone that moves us a step closer to first oil," said Mario Mehren, CEO of Wintershall.

"Wintershall believes in Norway. We have invested heavily in the country and are now developing a field that will continue to return value to Wintershall and Norway for many years to come. I am proud to see the field begin to take shape. Maria is a fitting symbol of our long-term commitment to Norway."

Maria is Wintershall's flagship development in Norway. Drilling of the six wells on the field started in March and the top holes are now complete. Drilling towards the reservoir section is underway, the operator said.

Drilling on the field is due to last up to 580 days. Some 68km of pipelines and two subsea templates have already been installed with the remaining installations due in 2017. Platform modifications to Kristin and Heidrun, and other offshore marine work is ongoing.

continued on page 4...



Norway launches APA 2017

Norway's Ministry of Petroleum and Energy (MPE) has launched this year's licensing round for mature areas on the Norwegian Continental Shelf (NCS) – Awards in Predefined Areas (APA) 2017.

In the APA 2017 round, the predefined area has been expanded to a total of 87 blocks, with 34 blocks up for grabs in the Norwegian Sea and 53 blocks in the Barents Sea.

The expansion includes blocks in the western Norwegian Sea and areas around **Wisting**, **Alta** and **Gohta** in the Barents Sea, said the MPE.

The deadline to submit bids is noon on 1 September 2017. The plan is to award new production licences at the start of 2018.

"Awarding prospective exploration acreage is a central pillar in the Norwegian government's petroleum policy. APA 2017 is the second largest expansion so far, and the largest expansion yet in the Barents Sea. This is imperative for effective resource management," said the Norwegian Minister of Petroleum and Energy, Terje Søviknes.

"The APA 2017 announcement shows our commitment to the government's petroleum policy and our ocean strategy. This expansion promotes effective resource management, high value creation and employment," Søviknes added.

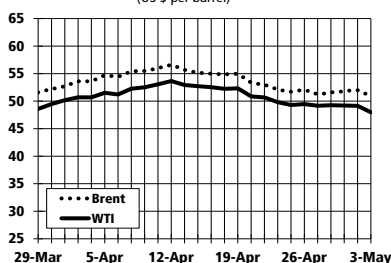
"Applications can be submitted for any blocks or parts of blocks within the predefined areas that are not already included in a licence three months before the closing date for application. This entails that acreage which is relinquished in the application period is regarded as announced at the time of governmental approved relinquishment," noted the Norwegian Petroleum Directorate.



OIL WATCH

Latest prices

Brent/WTI Crude Price
(US \$ per barrel)



INSIDE THIS WEEK

- Exploration Review2
- Schlumberger bags Norway job3
- Absheron 2019-2020 start-up4
- Cairn scoops Irish asset .. .5
- Safe Zephyrus bags Statoil deal6
- AGRgets NPD drilling role .7
- \$77.5m push for Morecambe Bay8

ASSOCIATED PUBLICATIONS:

E&P Daily

NEWS FOR THE GLOBAL OIL & GAS INDUSTRY

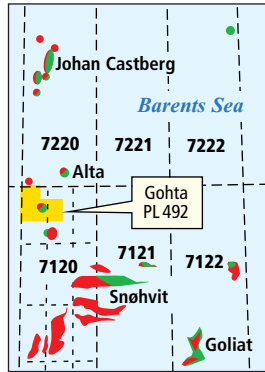
ASIA OIL AND GAS

NEWSLETTER

For a free trial to any of our other publications please go to our website:
www.ogilviepub.com

NORWAY

- Lundin Petroleum is gearing up to complete appraisal well **7120/1-5** on the oil and gas discovery well **7120/1-3 (Gohta)** in **Production Licence 492** (PL 492) offshore Norway as a dry hole. The well was drilled around 4km north of the discovery well and around 3km east of appraisal well **7120/1-4 S**, which was drilled in 2014. The latest well lies around 17km southwest of discovery well **7220/11-1 (Alta)**. The Gohta discovery was proven in 2013 in Permian carbonate rocks. Before well 7120/1-5 was drilled, the resource estimate for the discovery was between 10-21 MMcm (353.0-741.3 MMcf) of recoverable oil and between 5-8 Bcm (176.5-282.4 Bcf) of recoverable gas. Semi-submersible rig *Leiv Eiriksson* is drilling the probe, which was spudded on 3 March at a water depth of 345m (1,132ft) in the Barents Sea. "Pressure gradients were not established and the forecasted Permian-Triassic conglomerates were not encountered. The well is classified as dry, with traces of hydrocarbons," said the Norwegian Petroleum Directorate.



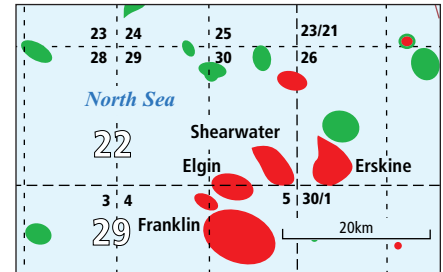
- Spanish major Repsol is drilling ahead with exploration well **6705/7-1** on the **Stordal** prospect. The well was spudded with the *Transocean Spitsbergen* rig on 7 April.
- Statoil has played down concerns that drilling in the Arctic is risky, days before it starts its drilling campaign in the Barents Sea, where the country believes around half of its remaining resources could be located. Despite opposition from environmentalists, the company plans to drill five wells in the Norwegian sector of the Barents Sea (see story on pg6).

UNITED KINGDOM

- The UK's Oil and Gas Authority (OGA) has awarded US \$1.9m (£1.5m) of contracts "to encourage further exploration in under explored areas of the UK Continental Shelf (UKCS)". "The datasets purchased will underpin much of the OGA's work across the exploration and production (E&P) life-cycle including; promotion of future licensing rounds and undeveloped discoveries, regional exploration projects,

area strategies and asset stewardship," said the OGA (see story on pg3).

- Shell has spudded the **22/30b-A7z** exploration well on the **Shearwater** prospect. The major is using the *Noble Hans Deul* rig to drill the well, which was spudded on 22 April.



- Perenco and its partners are drilling ahead with exploration well **43/26a-E12** with the Rowan *Gorilla VII* rig on a potential Carboniferous gas play in UK Southern North Sea **Block 43/26a**. The well was spudded on 2 December and will test the potential of a deep Carboniferous horizon beneath the mature reservoirs produced by the **Ravenspurn ST2** platform.
- Total is drilling ahead with exploration well **3/30-7** on the **Sween** prospect. The Rowan *Gorilla V* rig is drilling the probe, which was spudded on 9 January.

Offshore Services

Bristow starts Norway work

Bristow Norway started helicopter operations on three five-year contracts out of its new base at Florø, Norway, on 1 May – with the work supporting operators Statoil, Engie and Shell.

The Engie contract covers helicopter transportation to the *Gjøa* semisubmersible unit, while the Shell flights will go to the *Knarr* FPSO.

Bristow Norway Area Manager Heidi Wulff Heimark said: "We are proud of our new base at Florø and look forward to developing a good relationship with the local community. The investment in Florø is strategically important as it strengthens our position to operate further north towards central Norway."

Also on 1 May, Bristow Norway started a new five-year con-

tract at its well-established base in Bergen, Norway, supporting Statoil.

Services at both locations are operated using Sikorsky S-92 aircraft. Bristow said the S-92 helicopters are equipped with upgraded security systems, such as tail-mounted cameras and improved airborne-data connectivity, in addition to the newest technology in alert and navigation systems. The helicopters also have new technology to support enhanced landing procedures, to help reduce noise over congested areas, the company added.

With the new contract in Bergen, Bristow Norway is now providing flights between Bergen and all of Statoil's installations in the area.

Seadrill's \$225m triple rig sale

Seadrill has sealed a deal with Shelf Drilling to sell the *West Triton*, *West Resolute* and *West Mischief* for US \$225m.

The *West Triton* and *West Resolute* are scheduled to be delivered to Shelf Drilling by the end of May 2017, while the *West Mischief* will be delivered during Q3 2017 after completion of its current drilling contract with NDC in Abu Dhabi.

"The total debt outstanding on these three units is \$102m, providing excess sale proceeds of \$123m." Seadrill said.

The carrying value of the three units totals \$415m. A loss on disposal of \$190m is expected to be realised for Q1 2017, the company added.

Rigs

Rowan bags rig deals

Rowan Companies has landed contracts for its jack-up rigs offshore Saudi Arabia, Norway and the USA.

Rowan sealed a contract extension for the *Gilbert Rowe* jack-up at the current rate until 30 June 2017. The rig is operating for Saudi Aramco off Saudi Arabia with a dayrate of US \$69,000.

Lundin Petroleum has exercised a 90-day priced option for the *Rowan Viking* jack-up offshore Norway. Under this deal, the rig will stay under contract with Lundin until February 2018, with an additional 90-day priced option available. The rig's dayrate for the option has been reduced from \$275,000 to \$180,000.

OGA awards deals

The UK's Oil and Gas Authority (OGA) has awarded US \$1.9m (£1.5m) of contracts "to encourage further exploration in under explored areas of the UK Continental Shelf (UKCS)".

"The datasets purchased will underpin much of the OGA's work across the exploration and production (E&P) lifecycle including; promotion of future licensing rounds and undeveloped discoveries, regional exploration projects, area strategies and asset stewardship," said the OGA.

Four of the contracts will result in the data purchased being made freely available to the general public, industry and academia. In total eight

contracts were handed out

The following datasets will be made available to download via the OGA's website during 2017: APT (geochemical database only), CGG, Geostat, Getech.

Gunther Newcombe, operations director at the OGA, said: "The UKCS remains a highly attractive exploration destination and in order to maximise the economic recovery of oil and gas from the UKCS, exploration activity must be revitalised in both mature and frontier plays. Comprehensive, high quality well, seismic and subsurface databases which are made freely available are critical to this."

CONTRACTS AWARDED BY OGA

- APT: West of Shetlands geochemical database
- Belltree: Reservoir benchmarking
- CGG: Well logs and key databases
- Geostat: Jurassic stratigraphy of the Central North Sea
- Getech: UKCS satellite gravity data
- Hannon Westwood: Prospect and lead database
- IHS Markit: Fields and discoveries database and prospect and lead database
- IKON: Rock physics studies

Seismic

BP's seismic breakthrough

BP says it has made "a major breakthrough in seismic imaging" that has identified more than 200m bbl of additional resources at the UK major's Atlantis field in the deepwater US Gulf of Mexico (GoM).

"As a result of this early success, BP now is deploying this technique to fields elsewhere in the GoM, as well as in Azerbaijan, Angola and Trinidad and Tobago," BP said.

"The innovation has enabled BP to enhance the clarity of images that it collects during seismic surveys, particularly areas below the earth's surface that complex salt structures previously obscured or distorted. The sharper seismic images mean that BP can drill new development wells in deepwater reservoirs with higher confidence and accuracy."

"This technological breakthrough has essentially allowed our team to find a new oil field within our existing Atlantis field," said Bernard Looney, chief executive of BP's global upstream business. "Given the overwhelming success of this project, we are now deploying this technology across BP's

global operations."

Proprietary algorithms developed by BP's Subsurface Technical Centre were applied on seismic data run at BP's Centre for High Performance Computing, one of the largest supercomputers in the world dedicated to commercial research. The algorithms allowed data that would normally take a year to be analysed to be processed in only a few weeks, accelerating BP's development decisions for the field, BP noted.

The algorithms enhance a technique known as Full Waveform Inversion, which matches seismic simulations with existing seismic data to produce high quality subsurface images.

"This innovation again shows that BP remains at the forefront of advanced seismic imaging and digital technologies," said Ahmed Hashmi, BP's head of upstream technology. "The new technique has produced the best images of this reservoir that we have ever seen."

Schlumberger bags Norway job

Aker BP has handed Schlumberger a framework contract for the acquisition of 4D seismic data offshore Norway.

The contract will last for four years, with two options to extend for two years.

The deal includes WesternGeco marine acquisition of 4D seismic data over the Aker BP-operated fields **Alvheim**, **Bøyla**, **Skarv/Snadd** and **Ula** in 2017. This part of the agreement, which has the support of the partners on the four fields, has an independent market value of around US \$30m, Aker BP said.

The 2017 seismic acquisition work will start in May and will be carried out by the *WG Amundsen* seismic vessel.

"We will be using the best seismic technology available on the market; IsoMetrix marine isometric seismic technology. The result is data quality that surpasses what we have been able to achieve previously," said senior vice president Reservoir at Schlumberger, Ole-Johan Molvig.

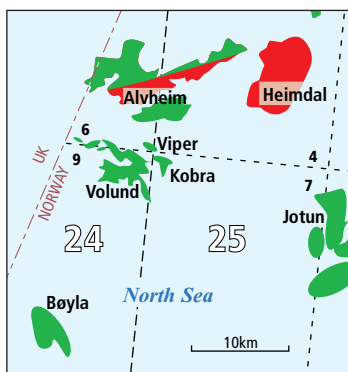
The 4D seismic method requires acquisition of seismic data in the exact same positions as a previously recorded survey.

This allows changes in the reservoir to be compared and recorded over time.

"We use this information to make decisions about how we will further develop the field by drilling new production wells, or through measures for injecting water or gas to improve recovery through existing production wells," added Molvig.

Gathering knowledge is an important key for improving the recovery rate, maximising value creation, and thus extending field lifetime, the company added.

"The extensive seismic acquisition on our own operated fields is yet another confirmation of Aker BP's stated ambition and commitment to the Norwegian Shelf – also during a period of decline and reduced activity in the industry in general," noted Molvig.



Are you reading somebody else's copy? Why not order your own?

For details of discounted bulk subscription rates contact Ogilvie Publishing on:

Tel: +44 (0)191 567 8497

Email: subs@ogilviepub.com

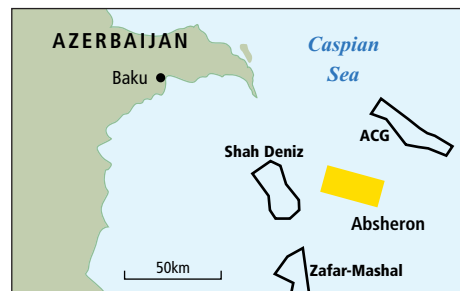
Absheron 2019-2020 start-up

Natural gas production from the **Absheron** field in Azerbaijan's sector of the Caspian Sea could start in late 2019 or early 2020, according to an official at Azerbaijan's state-owned SOCAR.

Absheron is located 100km southeast of Baku and 25km northeast of the

Shah Deniz gas field. It covers around 270sq km and is operated by French major Total.

The field, discovered in 2011, is estimated to hold 350 Bcm (12.36 Tcf) of natural gas and 45m tonnes of condensate.



Maria 1H 2018 start-up possible

...continued from page 1 Located in the Haltenbanken Area of the Norwegian Sea, the Maria reservoir will be linked via subsea tieback to three existing platforms in the area.

The Maria wellstream will go to the **Kristin** platform for processing while supply of water for injection into the reservoir will come from the **Heidrun** platform and lift gas will be provided from **Åsgard B** via the **Tyrihans** subsea template.

Processed oil will be shipped to the **Åsgard** field for storage and offloading to shuttle tankers. Gas will be exported via the Åsgard Transport System to Kårstø.

“Maria is a smart field solution that uses proven technology to get the most from existing infrastructure in the area. In challenging times we have worked closely with our partners and

the Norwegian authorities to create a field that will make a lasting positive impact,” said Hugo Dijkgraaf, Wintershall’s Maria project director.

Spending on the Maria development is estimated at around US \$1.78 Bn (NOK 15.3 Bn). Recoverable reserves on the field are estimated around 180m boe, of which the majority is oil. First oil is expected in 2018, with start-up now possible into the first half of the year given the current progress.

The Maria field is located around 20km east of the Kristin field and around 45km south of the Heidrun field in the Halten Terrace in the Norwegian Sea.

Wintershall is the operator of Maria with a 50% stake, while Petoro holds 30% and Centrica Resources has 20%.

Production

Norway March output data

Preliminary production figures for March 2017 show an average production of 2.145m b/d of oil, NGL and condensate, which is an increase of 63,000 b/d (around 3%) compared to February.

Total gas sales were 11.2 Bcm (395.4 Bcf), which is an increase of 1.1 Gcm from the previous months.

Average liquids production in March was: 1.734m b/d of oil, 380,000 b/d of NGL and 31,000 b/d of condensate. Oil production is around 8.0% higher than the oil production in March last year and is about 4.3% higher than the NPD’s prognosis for March 2017. The oil production is around 1.6% above the

prognosis so far this year.

The total petroleum production for the first three months in 2017 is around 62.6 MMcm oil equivalents (2.21 Bcfoe), broken down as follows: around 24.0 Mcmoe (847.2 Mcfoe) of oil, 5.9 Mcmoe (208.3 Mcfoe) of NGL and condensate and 32.8 Mcmoe (1.16 MMcfoe) of gas for sale. The total volume is 0.3 Mcmoe (10.6 Mcfoe) higher than in 2016.

Final production figures from February 2017 show an average production of around 1.668m b/d of oil, 0.414m b/d of NGL and condensate and a total of 10.1 Bcm (356.5 Bcf) of saleable gas production.

Trends

Upstream ‘sentiment improves’

Sentiment in the upstream oil and gas sector has “undoubtedly improved since turn of the year, which brought the implementation of OPEC’s long-awaited output cut”, says a new report by consultants Douglas-Westwood (DW).

“Attention has shifted from lay-offs and spending cuts to opportunity seeking and renewed project sanctioning activity. However, a significant number of challenges are still faced, posing a substantial threat to the upstream investment outlook through the coming years,” DW noted in its Upstream Investment Outlook.

The main points in the report are:

- Co-ordinated OPEC and non-OPEC production cut will push the oil market into undersupply this year.
- Vast volumes of offshore supply to be added next year from projects sanctioned pre-downturn, tipping market back into oversupply.
- Operators are likely to continue to focus on gas exploration and export methods (LNG & FLNG) over the long term to adapt to shifting demand patterns.
- The financial health of E&P players has been significantly

dented by the downturn, but non-OPEC national oil companies are particularly well positioned – having made substantial cuts to dividends and capex.

- Onshore is identified as the first area of development to return as oil prices continue to stabilise and trend upwards, due to short lead times and relatively strong returns on investment – as has already been seen in the US since mid-2016.
- A difficult two years has led to a strong reaction from the OFS supply chain, from cost reductions to merger and acquisition activity. However, significant excess capacity still exists – particularly offshore.

“Oil prices hovered in the mid-\$50/bbl range for much of Q1, however a quicker than expected rebound in US onshore activity – accompanied by significant inventory builds – has provided pause for caution. While the macroeconomic environment has undoubtedly improved, the foundations of the recovery may not be as solid as initially thought, with large uncertainties surrounding OPEC and non-OPEC compliance over the rest of 2017, as well as the significant volumes of crude expected to be added in 2018.”

Cairn scoops Irish asset

Europa Oil & Gas has been given the green light from the Irish government to transfer a 70% operating stake in **Licensing Option 16/19** (LO 16/19) offshore Ireland to Cairn Energy.

The operating stake will be transferred to Capricorn Ireland Limited, a wholly owned subsidiary of Cairn Energy.

Following the transfer, Europa will hold the remaining 30% stake in the LO 16/19, which covers around 976sq km on the Western Flank of the South Porcupine Basin offshore Ireland.

The companies agreed to the farm-out on 8 March. Under the terms of the deal, Cairn will fund Europa's share of the Crean multi-client 3D seismic programme, which will include the acquisition, processing, and interpretation of a 3D seismic survey over LO 16/19.

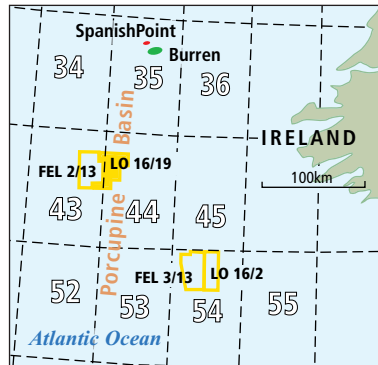
Future exploration work on LO 16/19 will be based on the results of detailed prospect mapping work to be carried out on the processed dataset. As far as unrisks prospective resources

go, Europa previously said that several Cretaceous submarine fans within the licence hold between 300m to 1 Bn boe.

Europa's CEO Hugh Mackay said: "The farm-out of LO 16/19 demonstrates how we intend to fast-track the exploration of our industry leading position offshore Ireland by securing suitable partners with whom we can take each of our licences forward. In line with this, we continue to talk with a number of interested parties for our remaining licences.

"LO 16/19 is just one of seven offshore Ireland licences we hold. All our licences cover 5,818sq km, six play types, three basins, and twenty prospects and leads, which we estimate potentially hold gross mean unrisks resources of more than 4 Bn

boe and 42.49 Bcm (1.5 Tcf) of gas. As a result, with drilling activity set to commence in the region in the near term, Europa is strategically placed to benefit from any success with the drill bit."



Engineering & Construction

New Walk-to-Work system

Ampelmann has designed its new 'S-type' Walk-to-Work system "as a cost effective and safe option in the transportation of workers and luggage to and from offshore platforms".

Ampelmann launched the new Walk-to-Work system as an alternative to using helicopters or baskets.

"In total, the cost of using the system will be around 30% cheaper than helicopters. The S-type builds on Ampelmann's track record of innovative design by incorporating a lightweight system that uses a low amount of energy to operate," the company said.

Aimed at the global oil and gas market where volume of crew is high and the sea state can be severe, the S-type can continuously transfer 50 people and luggage in five minutes in significant wave heights of up to 3-4m (10-13ft).

The S-type design includes a separate luggage belt, can be tailored for installation to individual vessels and is expected to be a particularly attractive option on current or new build fast or light-weight medium-sized vessels; such as mono-hulls, catamarans and trimarans.

Gerbrand Marbus, Crew Change Market manager, said: "The S-type can easily transfer more people at a time than helicop-

ters and is a safe alternative. As the industry continues to look for ways to work more effectively, we have listened to operators' requests and developed a system that should be an attractive option for companies as well as providing more comfortable transportation for their workforce.

"In developing the S-type we worked closely with vessel designers to provide an integrated package that has a reduced footprint and is lighter than comparable systems," added Marbus.

"With this integrated package, different clients can share logistics and see walk to work as an offshore bus service reducing their crew transportation costs by 30 to 40%. The technology used in the transportation system will place the S-type as a leader in the Walk-to-Work crew change market."

The S-type provides a wide operational range thanks to its 360° access and is a lightweight system with low energy consumption. In comparison, it is approximately half the weight and uses 50% less energy than typical similar systems.

In addition, the S-type occupies a small deck space and can be fully integrated with its host vessel. It requires no alterations to the receiving platform, Ampelmann said.

HongHua LNG platform design

HongHua Offshore has completed the basic design for its prototype LNG production platform (PLNG).

The PLNG development has taken several years, cost more than US \$30m and has been financed and led by HongHua Offshore and HongHua Infrastructure Partners (HHIP), as well as several engineering companies, HongHua said.

HHIP is made up of HongHua Offshore, China Aerospace (CASC), Braemar Technical Services and EnTX GasTek Global Ltd.

In turn, HHIP is supported by companies including Wood Group, GE Oil & Gas, ABS, Bureau Veritas and ARUP.

The prototype and a pre-Front End Engineering and Design (pre-FEED) study was completed for a planned project offshore the West Delta area of the US Gulf of Mexico (GoM). ABS has granted an approval in principal for the design. Other projects are under consideration in the GoM, Latin America,

South East Asia and Africa, HongHua said.

Wood Group conducted the pre-FEED with the participation of Braemar Technical Services and GE Oil & Gas.

The PLNG facility is comprised of a number of different fixed offshore platforms joined to form a unit for the production, storage and shipment of LNG. It is designed to withstand weather conditions on the US GoM shelf but can be adjusted to most offshore conditions in water depths up to 100m (328ft).

The main components are GE liquefaction trains powered by marinised GE LM2500 gas turbines, aluminum FSP storage tanks, and marine loading facilities. GE Oil & Gas also designed the power platform, which supplies electric power to the LNG pumps, marine facilities, and accommodation.

The FSP storage tanks were developed by TankTek, a HongHua subsidiary, in conjunction with Braemar Technical Services.

Statoil backs Arctic plans

Norway's Statoil has played down concerns that drilling in the Arctic is risky, days before it starts its drilling campaign in the Barents Sea, where the country believes around half of its remaining resources could be located.

Despite opposition from environmentalists, the company plans to drill five wells in the Norwegian sector of the Barents Sea, including **Korpfjell**, which will be the world's northernmost well, in a formerly disputed border area with Russia.

"We will start drilling the first well, **Blaamann**, during May followed by **Kayak**, **Gemini Nord**, **Korpfjell** and **Koigen Central**," a Statoil spokesman told Reuters, adding that each well could take around a month to drill.

All the wells are in areas free of sea ice thanks to the warm Gulf Stream, with sea and wind conditions similar to the North Sea, and some 400km away from the "ice edge zone" – where at least 10% of the sea is covered by ice.

"All wells will be drilled so far south of the existing ice that in the event of any spillage, no oil would never reach the mar-

ginal ice zone," Statoil said.

Even in winter, there have only been 10 days of ice in the last 14 years in the areas where drilling is planned, it said.

Statoil said the statistical probability of a blowout, an uncontrolled oil spill from a well, was 0.014% – or one for every 7,100 exploration wells.

Statoil said drilling the **Koigen Central** well, some 109km from **Bjoernoeya** (Bear Island), one of the largest seabird colonies in the Arctic, posed the biggest environmental risk. Its own estimates showed an oil spill at **Koigen Central** could reach **Bjoernoeya** within 10 days. The company said it would have vessels on standby round the clock in case of any emergency.

Statoil also said Norway and Russia had a joint contingency plan in case an oil spill from the **Korpfjell** well drifted to Russian waters some 37km away.

The *Songa Enabler*, a rig owned by **Songa Offshore**, is on its way to drill the first well, **Blaamann**, 26km from **Eni's Goliat** field, the world's northernmost field in production.

Vessels

Safe Zephyrus bags Statoil deal

Statoil has taken on **Prosafe's Safe Zephyrus** semi-submersible accommodation vessel for **Phase 1** of the **Johan Sverdrup** hook-up and commissioning project in the Norwegian North Sea.

The contract duration will be one of three scenarios starting in early August 2017: a 12-month firm period from late Q2 2018; a 12-month firm period from late Q3 2018 with four months of options; or five months firm from late Q2 2018 plus six months of options and four months firm from Q2 2019 plus four months of options.

"The value of the contract firm period will be between US \$51m and \$53m, including fuel, mobilisation and demobilisation depending on the scenario nominated. Revenue generated from the provision of catering services is in excess of the total value," **Prosafe** said.

"The contract will provide longevity of operations for the *Safe Zephyrus* and generate a firm cash flow in a soft market. The combination of building order book and longevity with the retained optionality from other vessels in the fleet represents a balanced situation for **Prosafe**.

"**Johan Sverdrup** is the largest discovery on the Norwegian Continental Shelf in recent years and **Prosafe** is pleased to work with Statoil and its partners on this significant project," **Prosafe** added.

The *Safe Zephyrus* is one of the most advanced accommodation semi-submersible vessels in the world, capable of ensuring the best operability through high gangway connectivity in the harshest of environments whilst providing a total of 450 beds, **Prosafe** noted.

Prosafe fleet update

Prosafe reports that its fleet utilisation rate in the first quarter of 2017 was 40%.

The *Safe Boreas* continued a contract with **Repsol Sinopec** (formerly **Talisman Sinopec**) in the UK North Sea and was in full operation throughout the quarter. The **Repsol Sinopec** contract at the **Montrose** field has been extended until 24 April 2017 "at market adjusted rates".

The *Safe Zephyrus* completed a contract with **Aker BP** offshore Norway at the end of January and is currently laid up in the UK.

The *Safe Notos* started a three-year and 222-day contract for **Brazil's Petrobras** on 7 December 2016 and was on contract throughout the quarter. The *Safe Concordia* was fully contracted in the quarter to **Petrobras** and "continues on short-term extensions at a market adjusted day rate".

The *Safe Scandinavia* Tender Support

Vessel (TSV) was fully contracted in the quarter with Statoil. The TSV contract has a firm period until July 2018.

The *Safe Caledonia* is undergoing a five-year SPS before starting a 134-day plus 30-day option contract with **Total** off the UK in mid-May 2017.

"The *Regalia*, *Safe Bristolia*, *Safe Astoria* and *Safe Regency* were idle in the quarter. The *Regalia* is laid up in the UK, the *Safe Bristolia* is laid up in Norway, while the *Safe Astoria* is laid up in Indonesia," **Prosafe** said in a fleet status report.

"The *Safe Regency* is laid up in **Curaçao** (Brazil) and the company has taken the decision to sell the vessel for scrap in the near term. The *Safe Lancia* was sold for scrap in the US in March 2017. Following this, **Prosafe** has scrapped four vessels.

Calendar 2017

MAY

8-12 Global Industrial Cyber Security Professional (GICSP) training London, UK or Amsterdam, Netherlands
Email: info@imfacademy.com
Tel: +31 (0)40 246 02 20
www.imfacademy.com

16-18 Global Commodity Risk Management Forum London, UK
<http://www.comriskforum.com/>

JUNE

5-7 Operational Excellence in Energy, Chemicals & Resources Summit Calgary, AB, Canada
<https://opexsummit.iqpc.com>

5-9 Global Industrial Cyber Security Professional (GICSP) training London, UK or Amsterdam, Netherlands
Email: info@imfacademy.com
Tel: +31 (0)40 246 02 20
www.imfacademy.com

OCTOBER

9-13 Global Industrial Cyber Security Professional (GICSP) training London, UK or Amsterdam, Netherlands
Email: info@imfacademy.com
Tel: +31 (0)40 246 02 20
www.imfacademy.com

10-12 Operational Excellence & Risk Management Summit (Europe) London, UK
<http://opexandriskmanagement.europe.iqpc.com>

NOVEMBER

6-8 Operational Excellence in Oil & Gas Summit Houston, Texas, USA
www.opexinoilandgas.com

AGR gets NPD drilling role

AGR has been given a frame agreement to deliver well and drilling engineering advice to the Norwegian Petroleum Directorate (NPD) “to support evaluation of drilling programmes, well design and testing, completions and plugging and abandoning”.

The two-year deal has the option to be extended for a further year “for the provision of technical training and technological solutions for data management”.

Tore Øian, vice president of AGR’s Well Management unit in Norway, said: “This latest frame agreement with the NPD is testament to the level of experience and unrivalled expertise that our well management business has to offer.”

The NDP agreement follows several awards to support major operators on the Norwegian Continental Shelf, as well as an additional agreement with the NPD.

GE-Halvorsen win Castberg deal

An alliance between GE and Halvorsen has landed a contract from Statoil for the provision of a seawater sulphate removal system for the **Johan Castberg** oil field project offshore Norway.

The workload will be undertaken by GE Water & Process Technologies in co-operation with Halvorsen TEC.

GE said that the seawater sulphate removal unit (SRU) would help protect production wells in Statoil’s Johan Castberg project in the Barents Sea. The Johan Castberg field (formerly **Skrugard**) is located around 100km north of the **Snøhvit** field in the Barents Sea.

Engineers from the two companies are responsible for Front-End Engineering Design (FEED) work in close co-operation with the operator, as well as with Aker Solutions, which is in charge of the Floating, Production, Storage and Offloading (FPSO) vessel for Johan Castberg.

Work is expected to start this year after the Final Investment Decision for the project is made. This is GE’s first order of its seawater sulphate removal technology for the offshore oil and gas industry, and the first time GE and Halvorsen TEC have been jointly awarded a complete SRU order, although the pair have collaborated on several offshore oil and gas projects, GE said.

Svein Helge Pettersen, managing director of Halvorsen TEC, said: “We will be able to utilise our extensive engineering and fabrication capabilities in Norway to perform a majority of the

SRU work and support the local economy. Components also will be sourced from Norway whenever possible.”

Heiner Markhoff, president and CEO of GE Water & Process Technologies, added: “Sulphate removal is important to help ensure that production assets remain free of barium and strontium scale, which would precipitate if untreated seawater is injected.”

The SRU will allow Statoil to inject around 2 Mcm (70.6 Mcf) per hour of seawater at less than 20 parts per million of sulphate content and less than 20 parts per billion of oxygen. The SRU’s injection capacity will be 1.188 Mcm (41.94 Mcf) per hour at 6 bar.

The GE-Halvorsen TEC SRU package will include seawater sulphate reducing nanofiltration membranes, GE’s ZeeWeed horizontal ultrafiltration system, a deoxygenation membrane technology from 3M, and a full single-lift SRU.

In addition to the core technologies, GE is providing a service package for remote monitoring of the entire seawater injection plant.

GE said that the FEED portion of the project would last six months. Equipment delivery is expected to take place mid-2019, while the first oil is expected to be produced in 2022.

The project is divided into two phases. Aker will oversee FEED work during **Phase 1**, while the FPSO equipment will be fabricated and delivered during **Phase 2**.

Research & Development

Wind powered injection study

The DNV GL-led joint industry project, WIN WIN (WIND powered Water INjection), has completed its first phase and results suggest that wind power could be used to power offshore water injection.

“The project is currently moving into its second phase, which includes refining and testing the electrical systems, and investigating possibilities for broader applications. The project consists of four partners: DNV GL, ExxonMobil and Eni Norge – all part of the first phase – and the Norwegian Research Council – a new participant for this second phase,” said DNV.

“The first phase of the project determined the concept is technically feasible, capable of meeting performance targets, and cost-competitive with conventional water injection solutions. The WIN WIN concept includes a floating wind turbine, which supplies power to a typical water injection process that includes pumping and basic water treatment.

“The second phase will focus on extensive physical lab testing of the electrical systems at the DNV GL power laboratories in Arnhem, the Netherlands, thereby maturing the technical concept and expanding the system performance,” DNV added.

“In this next phase of the project, we’ll use a small scale physical set-up to conduct tests on the systems,” said project manager Johan Slätte. “We aim to instill confidence in the industry that the system and components in this configuration will perform well over time with a variable power input. While

phase one was a desktop study, this phase is a natural step before going into piloting with real prototypes.

“The second phase of WIN WIN is expected to run over the course of one to two years and will result in an application guideline document for the industry. If all tests are successful, a realistic timeline for a first full scale prototype could be around 2020,” Slätte added.

The next phase of WIN WIN will also help to further develop the economic feasibility of wind and potentially other renewables in complex environments with demanding functional requirements. The concept showcases alternative sources of energy and its reliability for off-grid situations, DNV noted.

“The WIN WIN project has shown great potential for the oil and gas industry to lower costs and increase efficiency, while also reducing its environmental footprint,” said project sponsor Johan Sandberg.

“Proving that large-scale renewable units can be integrated well into oil and gas systems will also expand the industry’s toolbox of technology solutions. It is a win for society with regards to emissions, and for the oil companies who can lower their costs on both equipment and operations.”

“We are encouraged by the success of the first phase and look forward to continued collaboration as the project progresses,” said Tom Schuessler, president of ExxonMobil Upstream Research Company.

\$77.5m push for Morecambe Bay...

Centrica has unveiled a US \$77.5m (£60m) investment in its operations in **Morecambe Bay** assets offshore the UK – which will unlock an extra 85.0 MMcm (3 Bcf) of gas and secure 350 jobs.

The project to refurbish the **DP6** and **DP8** 5,000-tonne platforms in the East Irish Sea, which is expected to start later this month, will increase production from the **Morecambe South** and **Morecambe North** fields “which already produce enough gas to heat 1.5million UK homes”, Centrica said.

“Over the course of the next nine months, the teams working on a jack-up accommodation barge – which will be moored alongside the DP6 and DP8 platforms – will overhaul the equipment on the normally-unmanned installations. They will also remove the lifeboats and 60-tonne cranes on both platforms so they can be refurbished and reinstalled.”

Around 50 people will be supporting the project onshore, while a further 300 will be working offshore for Centrica and its project partners.

Once complete, the campaign will unlock up to a further 85.0 MMcm (3 Bcf) of gas under the East Irish Sea by simplifying the process required to get it to shore.

“The project is just one part of a major investment programme planned for Centrica’s Morecambe Bay operations, both offshore and onshore,” the operator said.

Earlier this year, Centrica announced plans to remove some of the redundant equipment on its South Terminal at the Barrow Gas Terminals in a \$19.4m (£15m) project. All the gas from Centrica’s East Irish Sea fields is now processed at the newer North Morecambe Terminal, leading to the planning application to remove some of the oldest equipment at the nearby South Terminal.

Tamsin Lishman, Morecambe Bay director for Centrica’s Exploration & Production unit, said: “The Morecambe Bay fields have been a cornerstone of our business since first gas flowed into the Barrow Gas Terminals more than 30 years ago, so we are delighted to continue investing in their future.”

...as Servelec scoops remote operations job

UK-based Servelec Controls has landed a contract from Centrica to provide a remote operations solution for the operator’s normally unmanned **DP6** offshore gas platform on the **Morecambe Bay** fields offshore the UK.

“The project will extend the life and commercial viability of the ageing assets. The project involves removing redundant plant and replacing obsolete equipment with new Servelec-designed systems,” said Servelec.

“As a result, Centrica will maximise the value of their asset through a more cost-effective and efficient maintenance programme, and reduced downtime. In addition to the clear commercial incentive, the project will decrease risk to personnel and improve safety by slashing intervention time.”

The **South Morecambe** field was discovered in 1974 and

covers an area of 83sq km. The **North Morecambe** field was found in 1976 and covers 28sq km.

First gas from South Morecambe came ashore in 1985. North Morecambe started supplying gas in 1994. Total gas reserves on discovery of both fields were estimated at 179 Bcm (6.45 Tcf), with the top of the gas reservoir being 900m (2,953ft) below sea level. The water depth is around 50m (164ft).

The two Morecambe gas fields lie in the Irish Sea, 40km west of Blackpool, northwest England.

The solution from existing and new technology includes a distributed control system, emergency shutdown system, fire and gas detection and smoke detection system. Once complete, each component will be monitored and controlled from an onshore operations centre.



www.ogilviepub.com

Contact the editor
by e-mail at:
shamlen@ogilviepub.com

To subscribe now
please complete this coupon
and post page to:

Ogilvie Publishing Ltd
56 Aylesford Mews
Sunderland
SR2 9HY
United Kingdom
Tel: +44 (0)191 5678497
subs@ogilviepub.com

- YES**, I want to subscribe to *European Offshore Petroleum Newsletter* for one year (50 issues) at £775
- I am enclosing my cheque payable to **Ogilvie Publishing Ltd**
- Please Invoice me

Name: _____

Title: _____

Company: _____

Address: _____

ZIP/Postcode: _____

Phone: _____

E-mail: _____

Editor: **Steven Hamlen**

Subscriptions:
E-mail: subs@ogilviepub.com
Tel: +44 (0)191 567 8497
Annual subscription: £775

ISSN 0332 5210

Head Office:
Ogilvie Publishing Ltd
56 Aylesford Mews
Sunderland
SR2 9HY
United Kingdom
Tel: +44 (0)191 567 8497

For a free trial to our associated publications:

E&P Daily ASIA OIL AND GAS

please email: **subs@ogilviepub.com**

Printing: Four Point Printing, Shepperton, UK

● **Unauthorised reproduction or distribution of European Offshore Petroleum Newsletter is strictly prohibited** ●