



Environmental Statement (ES) Summary

Title:	Cladhan Field Development Environmental Statement
Operator:	TAQA Bratani Ltd (TAQA)
Report No:	D/4150/2012
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Quad/Block:	210/29a & 210/30a
Project Type:	Field Development
Reviewer:	Paul Batty
Date:	5 April 2013

A) Project Description

TAQA propose to develop the Cladhan field, located in Blocks 210/29a and 210/30a in the northern North Sea approximately 90 kilometres (km) northeast of the Shetland Isles and 55 km west of the UK/Norway median line. The field is located in a water depth of approximately 143 metres (m).

The development will comprise the drilling of up to five wells (production, water injection, and appraisal wells), and the installation of subsea infrastructure that will be tied-back to the TAQA operated Tern Alpha platform, located 16.6 km from Cladhan, via a 10" production pipeline, a 10" water injection pipeline, a 4" gas lift line and a service umbilical.

The wells will be drilled using the *Transocean John Shaw* semi-submersible mobile drilling unit (MoDU). The top-hole sections will be drilled riserless with Water Based Mud (WBM), with cuttings discharged at the seabed; and the lower sections will be drilled with Low Toxicity Oil Based Mud (LTOBM), with cuttings skipped and shipped to shore for treatment and disposal. There are no planned well tests.

Pipelay operations will be undertaken using either a dynamically positioned (DP) reel-lay vessel or an anchor lay vessel. The pipelines will be trenched using a conventional sub-sea plough and mechanically backfilled. An estimated 140,000 tonnes of rock, 600 concrete mattresses and 2,000 x 25 kg grout bags will be deposited on the lines to mitigate upheaval buckling and protect the pipeline crossings and subsea infrastructure.

All proposed activities will be subject of an Oil Pollution Emergency Plan (OPEP) that will be submitted to DECC for approval prior to commencement of the operations.

Drilling is scheduled during the period Q3 2013 to Q4 2014, and subsea infrastructure installation is scheduled during Q2 2014, with first oil in Q1 2015. The Cladhan field is expected to remain in production until 2030, with a maximum estimated recovery of 3 million tonnes of oil and 266 million cubic metres of gas. Gas from the field will have a restricted flow and will be used as fuel on the Tern platform. It is therefore not anticipated that the

production will result in a significant increase in platform flaring.

B) Key Potential Environmental Impacts

The Environmental Impact Assessment (EIA) identified the following key activities as having the potential to cause an environmental impact:

- Drilling operations – MoDU anchors, combustion emissions, discharges including well clean-up, MoDU and vessel noise and accidental spills.
- Infrastructure installation operations – combustion emissions, pipelay, rock dumping, subsea infrastructure installation noise, hydrotest discharges and accidental spills.
- Production operations – atmospheric emissions, discharges and accidental spills.
- Wider concerns – significant accidental events, transboundary issues and cumulative effects

C) Key Environmental Sensitivities

The EIA identified the following environmental sensitivities:

- **Fish:** The development is in an area where there are fish spawning and/or nursery areas for Blue Whiting, Cod, Haddock, Norway Pout, Saithe, Whiting, Herring Mackerel and Sandeel. However, the spawning and nursery areas are extensive and the impact will be localised and temporary. The drilling of wells and pipelay are therefore unlikely to impact these species.
- **Seabirds:** Seabird vulnerability is very high in February, high in March, June, September and October and moderate to low during the rest of the year. Mitigation measures will be in place to prevent accidental spills that could have a significant impact on seabirds and this will be covered in detail in the OPEP.
- **Protected habitats:** There are no designated protected Annex I habitats in the vicinity of the proposed development. The closest identified Annex I habitats are the Pobie Bank Special Area of Conservation (pSAC), located approximately 50 km to the southwest of the proposed development, and the Braemar Pockmark (cSAC) and Scanner Pockmark cSAC, located approximately 240 and 320 km respectively to the south of the proposed development.
- **Protected species:** Minke Whale, White-beaked Dolphin, White-sided Dolphin and Harbour Porpoise have been recorded in the development area, with highest numbers recorded during the period of June to October. Grey and Common Seals inhabit the coastal waters around the North Sea and have occasionally been observed to travel long distances when foraging, but both species are unlikely to be present in large numbers in the area. Any disturbance of marine mammals will be limited to the drilling and subsea installation operations and will be localized and temporary and unlikely to be significant.
- **Other Users of the Sea:** The proposed development is located in ICES rectangle 51F0, and relative fishing effort in the area is very low. Shipping density in the vicinity of the proposed development is low. There are no renewable energy or military activities in the area. Appropriate navigational controls will be put in place, and it is not anticipated that there will be any significant impact on other users of the sea.

D) Consultation

The Joint Nature Conservation Committee (JNCC), Marine Scotland (MS), the Maritime and Coastguard Agency (MCA), the Scottish Fishermen's Federation (SFF) and the Ministry of Defence (MoD) were consulted on the proposals. The ES was also subject to Public Notice.

- **JNCC:** JNCC confirmed that adequate measures have been put in place to minimise the potential impacts of the activities on the marine environment.
- **MS:** MS confirmed that there were no objections to the proposed development, but they would wish to comment further on the chemical risk assessment when they are consulted on the relevant chemical permit applications.
- **MCA:** MCA confirmed that there were no objections.
- **SFF:** SFF confirmed that there were no objections.
- **MoD:** MOD confirmed that there were no objections.
- **Public Notice:** No comments were received in response to the Public Notice.

E) Further Information

Further information was requested from TAQA to address issues raised by the consultees or identified during the internal DECC OGED review, in relation to the marine survey information, post-drilling seabed recovery, the subsea infrastructure installation and produced water re-injection. Additional information was provided by TAQA on 18 February 2013 which adequately addressed the issues raised.

F) Conclusion

Following review of the ES, the comments received from consultees and the additional information provided by TAQA, DECC OGED is satisfied that this project will not have a significant adverse impact on the receiving environmental or the living resources it supports, or on any protected sites or species or other users of the sea.

G) Recommendation

On the basis of the information presented within the ES and advice received from consultees, DECC OGED is content that there are no environmental or navigational objections to approval of the proposals, and has advised DECC LED that there are no objections to the grant of the relevant consents.

Approved

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pp. Sarah Pritchard

Head of Offshore Environmental Operations

Date.....