Environmental Statement (ES) Summary and Sign-Off

Title:	Tyne 44/18 Drilling and 43/24 Incremental Production ES
Operator:	Perenco UK Limited (Perenco)
Report No:	D/4139/2012
Submission Date:	February 2012
Block No:	44/18
Development Type:	Extension of Production
Reviewer:	Julie Cook
Date:	14 June 2012

A) Project Description:

The Tyne North Field is located in Block 44/18 of the southern North Sea, 170 km east of the nearest landfall at Flamborough and 20 km west of the UK / Dutch median line. Perenco plan to further develop the Tyne North field by drilling an additional well from the Tyne platform (as a sidetrack from the existing T5 well), using the *Ensco 80* jack-up Mobile Drilling Unit (MoDU). Reservoir fluids from the proposed well will be exported from the Tyne Platform via the existing 20" export pipeline to the Trent platform, located in Block 43/24. Gas will be processed on the Trent platform and fed into an existing export pipeline to the Bacton Gas Terminal. The drilling of the additional well will result in a peak increase in gas production from the Tyne North field of approximately 587 thousand cubic metres/day, which exceeds the threshold that requires an Environmental Statement (ES).

The earliest start date for the proposed drilling operation is Q3 2012, and it is estimated that it will take approximately 90 days to complete the well, which will then be brought into production after a short well test .

B) Key Environmental Sensitivities

The EIA identified the following environmental sensitivities:

- Fishery stocks: The Tyne area is within spawning grounds for mackerel (May to August), herring (August to October), sprat (May to August), sole (March to May), plaice (December to March) and *Nephrops* (January to December), and within nursery areas for sprat, *Nephrops* and whiting. The Trent area is within spawning grounds for mackerel (May to August), sprat (May to August), lemon sole (April to September) and plaice (December to March), and within nursery areas for sprat, lemon sole and whiting.

- Seabirds: Seabird vulnerability to surface pollution in the Tyne area is high or very high in January, March to May, July and September to December, and moderate to low for the remainder of the year. Seabird vulnerability in the Trent area is high or very high in January to May and July to December and low during June.

- Annex I Habitats: The Tyne platform is located within the the Dogger Bank cSAC, but the Trent platform is located outside the protected habitat.

- Annex II Species: Frequent sightings of the harbour porpoise and white-beaked dolphin have been recorded in the Tyne and Trent areas and neighbouring

quadrants, mainly in the summer months. Low numbers of grey and common seals may also be present within the area.

- Other users of the sea: Total fishing effort in the Tyne and Trent areas is comparatively low. Shipping intensity is high.

C) Key Environmental Impacts:

The EIA identified the following potential impacts and related mitigation measures:

Physical interference: Appropriate mitigation measures will be put in place to ensure that other users of the sea are aware of the proposed activities, e.g. 500m exclusion zone around the MoDU which will be located adjacent to the existing Tyne Platform, the use of standby vessels, and the issue of Kingfisher Bulletins and Notices to Mariners. The area has relatively low fishing activity and high shipping activity. The impact of the proposed development is considered to be insignificant.

Seabed disturbance: The drilling of the proposed well and installation of the MoDU, including the contingency deposit of 5,000 tonnes of rock, will have a direct impact on the benthic community. The estimated worst case impact of the Tyne facilities within the Dogger Bank cSAC is 0.001521 km which equates to 0.00000124% of the cSAC. It is therefore concluded that the proposed operations will not have an adverse effect on the integrity of the Dogger Bank cSAC.

Noise: A number of noise sources will be associated with the proposed operations, including noise from drilling operations and vessel movements. Noise levels are not expected to significantly exceed normal background levels in the area. The noise is therefore unlikely to result in injury or significant disturbance of European Protected Species.

Atmospheric emissions: The main source of atmospheric emissions will be fuel use during the drilling, well clean-up, production and support operations. Considering the highly dispersive nature of the environment, potential impacts are considered to be insignificant.

Marine discharges: The proposed well will be drilled using a combination of Water Based Mud (WBM) and Low Toxicity Oil Based Mud (LTOBM), with WBM cuttings discharged to sea and LTOBM cuttings shipped ashore for disposal. All the chemicals used in the course of the drilling and production operations will be selected on the basis of technical compatibility and environmental performance. The marine environment in the development area is sufficiently dynamic to facilitate rapid dispersion and dilution of the proposed discharges, and potential environmental impacts are considered to be insignificant

Accidental events: A number of control measures will be in place to minimise the risk of accidental events, and the proposed operations will be covered by an Oil Pollution Emergency Plan. Modelling of worst-case blow-out and diesel spills has been undertaken, and related impact assessments included in the environmental impact assessment

Cumulative Impacts: The proposed development is in an area where there are a range of oil and gas operations, in addition to shipping and commercial fishing operations. However, it is not anticipated that there will be any significant in-combination effects. .

Transboundary Impacts: The UK / Netherlands median line is approximately 20 km east from the development area. No transboundary impacts are likely as a result of proposed operations.

D) Consultation:

Comments were received from The Joint Nature Conservation Committee (JNCC) and The Centre for Environment, Fisheries and Aquaculture Science (CEFAS Environment & Chemical). The ES was also subject to public notice.

JNCC: JNCC advised that the contingency deposit of 5,000 tonnes of rock for rig stabilisation would have an effect on the qualifying Annex I sandbank habitat in the Dogger Bank cSAC. Considering that the proposed well is to be drilled using a MoDU located adjacent to the existing Tyne Platform, DECC concluded, that the contingency deposit of rock for rig stabilisation and the proposed drilling operations are unlikely to have significant effect upon the integrity of the Dogger Bank cSAC. JNCC confirmed that all environmental sensitivities of the area have been considered.

CEFAS (Environment): CEFAS Environment confirmed that they have no concerns.

CEFAS (Chemical): CEFAS Chemical confirmed they had no concerns in relation to the planned use of chemicals during the drilling or production operations, but would make a more detailed assessment of the proposals when Perenco submitted the relevant applications for chemical permits.

Public Notice: No comments were received in response to the public notice.

E) Further Information

Further information was requested from Perenco to address issues raised during the internal DECC review, which included clarification of the production profiles presented in the ES. Additional information was provided by Perenco on 16 May 2012, which adequately addressed the issues raised.

F) Conclusion:

Following consultation and the provision of further information, DECC OED is satisfied that this project will not have a significant adverse impact on the receiving environment 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 OED 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 : Sarah Pritchard - Head of Environmental Operations Unit

Sarah Pritchard

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Date: …26 June 2012……