

Environmental Statement (ES) Summary and Sign-Off

Title:	Inde 49/18B Drilling and 49/23A Incremental Production ES
Operator:	Perenco UK Limited (Perenco)
Report No:	D/4140/2012
Submission Date:	February 2012
Block No:	49/18
Development Type:	Extension of Production
Reviewer:	Julie Cook
Date:	20 November 2012

A) Project Description:

The Inde Field is located in Block 49/23 of the southern North Sea, 91 km east of the North Norfolk coastline and 34 km west of the UK / Dutch median line. Perenco plan to further develop the Inde field by drilling an additional sidetrack well from the Inde 49/18B platform (as a sidetrack from the existing B12 well), using the *Ensco 80* jack-up Mobile Drilling Unit (MoDU). Reservoir fluids from the proposed well will be exported from the Inde 49/18B platform via the existing 20" export pipeline to the host Inde 49/23A platform, located in Block 49/23, where it will be processed and exported to the Bacton Gas Terminal. The drilling of the additional well will result in a peak increase in gas production from the Inde field of approximately 1,131 thousand cubic metres/day, which exceeds the threshold that requires an Environmental Statement (ES).

The earliest start date for the proposed drilling operation is Q4 2012, and it is estimated that it will take approximately 60 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 Inde area is within spawning grounds for mackerel (May to August), sprat (May to August), lemon sole (April to Spetember), plaice (December to March) and *Nephrops* (January to December), and within nursery areas for sprat, *Nephrops*, whiting and lemon sole.
- **Seabirds:** Seabird vulnerability to surface pollution in block 49/18 is high or very high in January to March and October to November, and moderate to low for the remainder of the year. Seabird vulnerability in block 49/23 area is high in February, March and December, and moderate to low for the remainder of the year.
- **Protected Habitats:** There are no designated protected habitats in the vicinity of the proposed development. The closest identified Annex I habitat is the North Norfolk Sandbanks and Saturn reef candidate Special Area of Conservation (cSAC), located 175 m east of the Inde 49/18B platform. The development proposals are not expected to have any significant impact on the protected habitat.
- **Protected species:** Harbour porpoise have been recorded in the Inde area with highest numbers recorded during the period of June to July. Grey and Common

Seals inhabit the coastal waters and have occasionally been observed to travel long distances when foraging, both species are unlikely to be present in the area of the proposed development. Any disturbance of marine mammals is expected to be limited to the drilling period, and the localised disturbance is considered unlikely to have any significant impact.

- Other users of the sea: Total fishing effort in the Inde area is comparatively low. Shipping intensity is very low.

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 Inde 49/18B platform, the use of standby vessels, and the issue of Kingfisher Bulletins and Notices to Mariners. 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 for rig stabilisation will have a direct impact on the benthic community. The area of seabed that will be directly impacted by these operations will be limited, and any impacts on the benthic communities are therefore anticipated to be very localised and insignificant.

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 34 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),The Centre for Environment, Fisheries and Aquaculture Science (CEFAS Environment), Maritime and Coastguard Agency (MCA), Ministry of Defence (MoD) and Northern Lighthouse Board (NLB). 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 proposed activities on the marine environment.

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

MCA: MCA confirmed that they have no objections.

MoD: MoD confirmed that they have no objections.

NLB: NLB confirmed that they have no objections.

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 1st October 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 : Wendy Kennedy - Head of Offshore Oil and Gas Environment and Decommissioning

Wendy Kennedy.....

Date:20 November 2012.....