Zennor Pathway Ltd

Finlaggan Field Development
Environmental Statement Summary

To: Jonathan Ward
From: Tracy Edwards
Date: 04 October 2018

<table>
<thead>
<tr>
<th>ES Title:</th>
<th>Finlaggan Field Development</th>
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<tbody>
<tr>
<td>Developer:</td>
<td>Zennor Pathway Limited</td>
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<td>Consultants:</td>
<td>Xodus Group</td>
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<td>OGA Field Group:</td>
<td>Central North Sea</td>
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<tr>
<td>ES Report No:</td>
<td>D/4201/2017</td>
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<td>ES Submission Date</td>
<td>25 August 2017</td>
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<tr>
<td>Block No:</td>
<td>21/05c, 22/01, 16/26</td>
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<td>Development Type:</td>
<td>Field Development</td>
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**Project Description**

Zennor Pathway Limited (Zennor) propose to develop the Finlaggan gas and condensate field, located in the central North Sea 165 kilometres (km) east of Peterhead and 58 km from the UK/Norway median line. The development is located in a water depth of approximately 139 metres (m).

The subsea development will consist of two production wells, drilled using an anchored semi-submersible mobile drilling unit (MoDU). The wells will be connected to a production manifold that will be tied-back to the existing Britannia platform in Block 16/26, operated by ConocoPhillips (UK) Britannia Limited, via a new 17 km insulated pipeline and umbilical. The pipeline and umbilical will be buried in the same trench, and a maximum of 145,000 tonnes of rock will be deposited over the length of the pipeline to mitigate upheaval buckling. A total of approximately 225 mattresses and 25 grout bags will also be required for protection at the Finlaggan drill centre and Britannia platform.

The wells will be drilled and suspended until the subsea infrastructure is installed in 2020, and first gas and condensate are expected in Q3 - Q4 2020.

**Key Environmental Impacts**

The Environmental Statement (ES) identified the following key potential environmental impacts:

- Physical presence and interactions with other sea users;
- Seabed disturbance;
- Marine Discharges;
- Atmospheric emissions;
- Underwater noise; and
Key Environmental Sensitivities

The ES identified the following key environmental sensitivities:

- **Fish:** The development is located within spawning grounds for cod, lemon sole, Norway pout, mackerel, sandeels and Norway lobster; and within nursery grounds for blue whiting, cod, European hake, haddock, ling, Norway pout, plaice, whiting, angler fish, herring, horse mackerel, mackerel, sandeels, sprats, spurdog, spotted ray and Norway lobster. There will be limited spatial and temporal impacts during drilling and construction activities, but the spawning and nursery grounds are extensive and the proposals are unlikely to have any significant impact.

- **Seabirds:** Seabird vulnerability to surface oil pollution is considered low throughout the year, although there is no available data for November and December. It is considered that there are sufficient mitigation measures in place to prevent accidental spills that could have a significant impact on seabirds, and appropriate Oil Pollution Emergency Plans will be required for the drilling, construction and production operations.

- **Seabed habitats and species:** Fauna in the development area is moderately diverse and typical of soft silty sediments. It includes bristle worms, shrimps, hermit crabs, brittle stars, sea urchins, sea anemones, sea pens, sea snails, sponges, foraminifera and octopus. Ocean quahog are also found but the abundance is relatively low. Direct impacts resulting from the anchoring of the semi-submersible drilling rig, the drilling operations and discharges, and the installation of seabed infrastructure including the pipelines and umbilical will be localised and are not considered to be significant.

- **Protected sites:** The tie-in of the Finlaggan pipeline at the Britannia platform is the closest element of the proposed development to a protected site. It is approximately 27 km from the Norwegian Boundary Sediment Plain Nature Conservation Marine Protected Area (NC MPA) and 27 km from the Scanner Pockmark Special Area of Conservation (SAC). No impacts on these sites are anticipated.

- **Marine mammals:** Recordings in the development area include bottlenose dolphin, harbour porpoise, killer whale, Minke whale, Risso's dolphin, white-beaked dolphin and white-sided dolphin. Grey and harbour seals are widely distributed along the east coast of Scotland, but they are unlikely to travel great distances offshore and sightings in the development area will be low. Noise impacts associated with the development will be of limited duration and/or extent and no significant adverse effects on marine mammals are anticipated.

- **Other users of the sea:** Fishing effort and value in the ICES rectangles covering the development area (44F0, 44F1 and 45F1) are reported as high, and Zennor has liaised with the Scottish Fishermen's Federation (SFF) to locate 'fishing gates' along the pipeline route. Shipping density is moderate. The main periods of interaction will be during drilling and pipeline installation, but the activities will be of limited duration and safety zones and appropriate navigational controls will be in place. It is therefore not anticipated that there will be any significant impact on other users of the sea.

- **Cumulative/Transboundary impacts:** No significant in-combination, cumulative or transboundary effects are anticipated.

**Key Mitigation Measures (including environmental or monitoring conditions)**

Three mitigation measures are considered particularly relevant to the impact assessment:

- Zennor has committed to adhere to the JNCC guidelines for minimising the risk of
disturbance and injury to marine mammals from piling when undertaking infrastructure piling activities.

- Zennor has committed to using a dynamically-positioned reel pipelay vessel to minimise interaction with fishing vessels during pipelay operations.
- Zennor has committed to creating "trawl safe" corridors and fishing gates along the pipeline / umbilical route, in consultation with the SFF, and will ensure locations are included in the FishSAFE system.

Consultation

The Joint Nature Conservation Committee (JNCC), Marine Scotland (MS), the Maritime and Coastguard Agency (MCA) and the Ministry of Defence (MOD) were consulted on the project. The Health and Safety Executive (HSE) was also notified of the proposals and the ES was subject to public notice.

- JNCC commented on a number of aspects and identified details that should be considered at the environmental permitting stage. They confirmed there were no objections.
- MS provided comments that were addressed by the provision of additional information (see below). They confirmed there were no objections.
- MCA requested that standard navigational conditions should be included at the environmental permitting stage. They confirmed there were no objections.
- MOD confirmed there were no objections.

No comments were received from the HSE or in response to the public notice.

Further Information

Additional information was requested from Zennor on 12 December 2017, and on 6, 11 and 17 September 2018, to address issues raised by consultees or during the BEIS OPRED review of the ES. The responses received from Zennor on 10 April, 20 July and on 12 and 24 September 2018 satisfactorily addressed all the issues raised.

Determination

Following review of the ES, the responses received from consultees and the additional information provided by Zennor, BEIS OPRED is satisfied that the proposed development will not have a significant adverse impact on the receiving environment or the living resources it supports, or on any protected habitats or species or other users of the sea.

Recommendation

BEIS OPRED is content that there are no objections to the proposals and agrees to the OGA issuing the necessary consent to Zennor to allow the development to proceed.

[Signature]
Jonathan Ward
Director, Environmental Operations
BEIS OPRED

[Date] 8/16/18