## Project Description

IOG North Sea Ltd. and IOG U.K. Ltd. (IOG) are proposing to develop the Blythe, Elgood and Southwark fields. The fields are located in blocks 48/22, 48/23 and 49/21 respectively, in the Southern North Sea, approximately 35 kilometres (km), and 55 km (Southwark) from the North Norfolk coastline coast and approximately 105 km, and 65 km (Southwark) from the UK/Netherlands median line. The water depth in the area is approximately 30 metres (m).
Blythe and Elgood

The Blythe development will consist of a small minimum production facilities platform (unmanned), and one well (wellhead on the platform). The Elgood development will consist of one subsea well (with subsea tree and wellhead) tied back to the Blythe platform. A 6” diameter trenched and buried 9.1 km flowline will transport the Elgood production from the subsea well to the Blythe platform. A subsea 6” diameter riser will connect the 6” flowline from Elgood to the Blythe platform. A 5” diameter trenched and buried 9.1 km hydraulic control umbilical will transport methanol and mono-ethylene glycol to Elgood.

Both fields will produce gas and condensate, which will be comingled at Blythe and exported via a newly installed 12” trenched and buried 24.5 km export pipeline into the existing recommissioned 24” export pipeline (Thames PL370), which links to the onshore Bacton gas terminal.

Southwark

The Southwark field will consist of one unmanned production platform and three wells and will produce gas and condensate that will be exported via a 5.9 km surface laid pipeline to the existing 24” export pipeline (Thames PL370) as described above.

First gas is expected Q3 2021.

Key Environmental Impacts

The ES identified and discussed the following as having the potential to cause an environmental impact:

- Atmospheric emissions
- Marine discharges
- Seabed excavation
- Deposits of materials/infrastructure on the seabed
- Noise
- Accidental events
- Other users of the sea

Key Environmental Sensitivities

The ES identified the following environmental sensitivities:

- **Fish**: The Blythe, Elgood and Southwark field lie within spawning grounds and nurseries for cod, herring, lemon sole, mackerel, plaice, sand eels and, sole; in addition to spawning and nurseries for whiting, sprat and *Nephrops* in the Southwark field. However, the spawning and nursery areas are extensive, and the proposals are unlikely to impact these species.

- **Seabirds**: Blythe and Elgood - Seabird sensitivity ranges from medium to high in the months January to March, low during May, June and July, and medium to very high from August to December. Southwark - Seabird sensitivity is very high after the breeding season and throughout winter; high between March and June, and low in August and September. It is considered that sufficient mitigation measures are in place to prevent accidental spills that could have a significant impact on seabirds, and an approved OPEP will be in place before operations commence.
- **Protected habitats:** The Blythe and Elgood development is located 15km east of the North Norfolk Sandbanks and Saturn Reef (NNSSR) SAC which has been dedicated for the presence of Annex I habitat, sandbanks which are slightly covered by seawater all the time and biogenic reefs. The Elgood development is also 30km south-west of the Wash and North Norfolk coast Special Area of Conservation (SAC), which has been dedicated for the presence of sandbanks which are slightly covered by seawater all the time and which provide extensive breeding and haul-out sites for harbour seal. The proposals are not anticipated to have any significant impact on these, or any other protected habitats.

- The Southwark field is located entirely in the NNSSR SAC, and the Southern North Sea (SNS) SAC, of which is designated for the presence of the Annex II species, harbour porpoise. Therefore, under the Offshore Petroleum Activities (Conservation of Habitats) Regulations 2001 (as amended), a Habitats Regulations Assessment (HRA) was undertaken, which concluded that the proposed operations, alone or in combination with other plans or projects will not have a significant effect on either site.
- **Protected species**: Minke whale, white beaked dolphin, Atlantic white sided dolphin and harbour porpoise have been recorded in all blocks. There have also been recordings of grey and harbour seals, which mostly inhabit coastal and inshore waters adjacent to Norfolk. No disturbance of marine mammals, or any other adverse impacts, are anticipated in relation to the proposals.

- **Other users of the sea**: The Blythe and Elgood development is located within International Council for the Exploration of the Sea (ICES) rectangle 35F1 and relative fishing effort fluctuates. There was a minor peak in 2014 before dropping again. Since 2015 there has been another increasing trend in effort which has continued to rise in 2017, although landings figures dropped. The Southwark development is located within ICES rectangle 35F2, and relative fishing effort is low. Shipping density is very high in the vicinity of Elgood and high in the vicinity of Blythe and Southwark.

- **In-combination, cumulative and transboundary effects**: No significant in-combination, cumulative or transboundary effects are anticipated as a result of the proposals.

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

No significant adverse impacts were identified which would warrant specific mitigation measures or monitoring conditions. All proposed activities will be undertaken in line with commitments detailed in the ES, the ES addendum and the consolidated additional information, and as per conditions attached to environmental approvals and best industry practice.
Consultation

The Joint Nature Conservation Committee (JNCC), Natural England (NE), the Centre for Environmental, Fisheries, and Aquaculture Science (CEFAS), Trinity House (TH), Marine and Coastguard Agency (MCA), the Marine Management Organisation (MMO) and the Ministry of Defence (MoD), were consulted on the proposals. The ES was also subject to public notice.

Further Information

Further information was requested on 17 July 2018, 5 April 2019, 31 May 2019, 29 November 2019, 4 December 2019 and 30 January 2020. An addendum was submitted on 30 August 2019 and a document containing consolidated additional information was submitted on 26 February 2020, both of which were subject to public notice and consultation.

Subsequent consultation

The Blythe Hub Development ES addendum (Southwark Field Development) and the consolidated additional information were both subject to a new public notice and consultation. No representations against the proposals were received, and it was confirmed that all comments had been adequately addressed.

Decision

Following its review of the ES, the ES addendum and the comments received from consultees and the additional information provided, OPRED 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 habitats or species or other users of the sea. In respect of the potential environmental impacts, the ES, the addendum and the consolidated additional information satisfactorily confirmed:

- Atmospheric emissions will rapidly disperse to background levels.
- No discharge of produced water. All fluids will be sent to the onshore Bacton terminal.
- Any cuttings contaminated with oil-based mud will be shipped to shore for treatment and disposal.
- Seabed excavation - pipeline trenching operations will be kept to a minimum. No trenching will occur in the Southwark field.
- Deposits will be the minimum required to achieve objectives; the use of any rock will be kept to a minimum and mattresses will be removed at the time of decommissioning, if not sooner.
- The platforms will be installed using suction footings, as opposed to piling which will significantly reduce the expected noise impacts.
- Appropriate controls will be in place to reduce the likelihood of accidental events.
- Other users of the sea – works will be undertaken in accordance with applicable navigational conditions.

In light of the above, the fact that the consultees did not raise any objections to the proposals and that no representations were received in response to the three public notices (for either the original or the ES addendum or the consolidated additional information), OPRED is satisfied that there are no grounds for objecting to the proposals and that the ES should be
approved. On behalf of the Secretary of State, OPRED has therefore given its agreement to the grant of the necessary consents by the OGA.

29 April 2020

Jonathan Ward
Director, Environmental Operations
BETS OPRED