



<b>Transboundary screening undertaken by the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) for the purposes of Regulation 24 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (the 2009 EIA Regulations) and Regulation 32 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 2017 EIA Regulations)</b>	
<b>Project name:</b>	Norfolk Boreas Offshore Wind Farm
<b>Address/Location:</b>	An offshore wind farm array located approximately 72km from the Norfolk coast; an offshore export cable extending from the array to landfall on the Norfolk Coast between Bacton and Eccles-on-Sea; and an on onshore cable corridor extending from the landfall to the existing National Grid substation at Necton, Norfolk.
<b>Planning Inspectorate Ref:</b>	EN010087
<b>Date(s) screening undertaken:</b>	First screening – 21 July 2017 following the Applicant’s request for a scoping opinion Second Screening – 21 August 2019 following submission of the application documents
<b>EEA States identified for notification/consultation:</b>	First screening: Belgium, Denmark, France, Germany and the Netherlands to be notified Second Screening: No new EEA States identified for notification. Belgium, France, Germany and the Netherlands to be consulted.

<b>FIRST TRANSBOUNDARY SCREENING - for the purposes of Regulation 24 of the 2009 EIA Regulations</b>	
<b>Document(s) used for transboundary Screening:</b>	Norfolk Boreas Offshore Wind Farm Environmental Impact Assessment Scoping Report (May 2017) ('the Scoping Report')
<b>Screening Criteria:</b>	<b>The Inspectorate’s Comments:</b>
<b>Characteristics of the Development</b>	<p>The Proposed Development is for a 1,800MW offshore wind farm. The key offshore components would be the following:</p> <ul style="list-style-type: none"> <li>• up to 257 wind turbines, each with a generating capacity of up to 20MW, maximum rotor diameter of 303m, maximum hub height of 200m and maximum tip height 325m (it is possible that more than one wind turbine generator model would be used across the site);</li> <li>• wind turbine foundations (and associated scour protection) comprising one or more of the following types:</li> </ul>

- monopiles;
  - jackets on pin piles (three or four legs) or suction caissons (on three or four legs);
  - gravity base structures; and
  - floating (mooring line or buoyancy stabilised).
- up to six offshore substation platforms (OSPs);
  - an offshore accommodation vessel or a fixed offshore platform (possibly shared with an offshore substation platform or a standalone accommodation and operation & maintenance (O&M) platform);
  - up to 650km of 66kV (or higher) inter-array cabling; and
  - mattresses or other protective substrate associated with cable crossings (if required).

Electricity would be exported from the offshore wind turbines via up to six offshore export cables which would make landfall between Bacton and Eccles within the county of Norfolk.

The key onshore components would be the following:

- up to six transition pits to connect the onshore and offshore cables at the landfall location (there are currently three landfall location options being considered within a stretch of approximately 10km of coastline between Bacton and Eccles-on-Sea);
- Horizontal Directional Drilling (HDD) to install ducts for the offshore cables between the transition pits to the intertidal zone (short HDD) or the subtidal zone (long HDD) (depending on ground conditions);
- jointing pits at 500-1000m intervals along the onshore cable route (10m x 3m x 2m depth);
- temporary mobilisation areas for welfare, parking and storage;
- a new substation of up to 300m x 250m with maximum building heights of 25m (alongside an additional 200m x 100m mobilisation area);
- an extension to the existing Necton substation and a connection of up to 12 no. 400kV interface cables to connect to the new substation;
- reconfiguration of the existing 400kV overhead powerlines around the Necton substation; and
- temporary construction areas and access roads.

Two different electrical connection options are currently proposed; High Voltage Alternating Current (HVAC) or High Voltage Direct Current (HVDC). The HVAC option would require a cable relay station close to the coast and up to 18 onshore cables, in up to six trenches. The HVDC option would require up

	<p>to 4 onshore cables, in up to two trenches. The decision as to which option would be used for the project would be agreed post consent and would depend on availability, technical considerations and cost.</p> <p>The Proposed Development will be designed to share infrastructure with the Norfolk Vanguard project. It is proposed that Norfolk Vanguard project would be consented first and would construct the following transmission infrastructure which would be used by the Proposed Development:</p> <ul style="list-style-type: none"> <li>• cable ducts;</li> <li>• access routes to jointing pit locations;</li> <li>• extension of the Necton National Grid substation and overhead line modifications; and</li> <li>• landscaping and planting around infrastructure.</li> </ul> <p>However, the application for Norfolk Boreas will also include these design elements in order to safeguard the Proposed Development in the event that Norfolk Vanguard is not consented/constructed.</p> <p>Onshore substation infrastructure and ducting for the onshore cables would be established prior to commissioning the first phase of the offshore works. For a three phase (HVAC) project, onshore construction would start in 2024 and continue until 2027; offshore construction would start in 2025 and be completed in 2028. The Scoping Report has not identified the construction period for a two phase (HVDC) development.</p>
<p><b>Location of Development (including existing use) and Geographical area</b></p>	<p><b>Offshore</b></p> <p>The offshore wind farm array area would be located approximately 72km from the Norfolk coast. The offshore export cable would extend in a westerly direction from the array to landfall, of which there are currently three location options being considered within a stretch of approximately 10km of coastline between Bacton and Eccles-on-Sea.</p> <p>Section 2.14 of the Scoping Report describes the numerous human activities and existing infrastructure in the vicinity of the Proposed Development. This includes navigational features (the West Friesland Traffic Separation Scheme (TSS) and the Off Brown Ridge TSS which are linked via a Deep Water Route); offshore wind developments; oil and gas pipelines and platforms; oil and gas licensed blocks; aggregate dredging; and dumping and disposal.</p> <p>The Scoping Report does not state the distance of the Proposed Development from any other EEA State.</p> <p><b>Onshore</b></p> <p>The Scoping Report presents a scoping corridor which</p>

	<p>incorporates all potential land where onshore infrastructure may be located. The scoping corridor extends westward from the landfall search area, to the existing National Grid Necton substation approximately 50km west-southwest.</p> <p>The scoping corridor is dominated by arable farming, tourism and the Bacton Gas Terminal in the north. There are several small villages including Happisburgh, Bacton and Walcott within the landfall search area; however, there are no large settlements. The scoping corridor includes a number of roads (notably the A140, the A1067 and the A4); numerous public rights of way (including the Norfolk Coast Path and national cycle routes); and sections of railway.</p>
<p><b>Environmental Importance</b></p>	<p><b>Offshore</b></p> <p><i>Designated sites</i></p> <p>The Proposed Development lies within the Southern North Sea candidate Special Area of Conservation (cSAC). The offshore cable corridor passes through the Haisborough Hammond and Winterton Site of Community Importance (SCI); the Greater Wash Marine proposed Special Protection Area (pSPA); and the Cromer Shoal Chalk Beds Marine Conservation Zone (MCZ).</p> <p><i>Birds</i></p> <p>The Scoping Report states that the following birds were identified as being present at the Norfolk Boreas site during the site specific surveys: red-throated diver, fulmar, gannet, cormorant, Arctic skua, great skua, unidentified small gull species, black-headed gull, common gull, little gull, kittiwake, unidentified large gull species, herring gull, great black-backed gull, lesser black-backed gull, unidentified tern species, sandwich tern, 'commic' tern<sup>1</sup>, black tern, guillemot and razorbill.</p> <p>Additional species that have been recorded during previous surveys of the Zone Environmental Appraisal (ZEA), East Anglia THREE, East Anglia ONE and Norfolk Vanguard sites are: black-throated diver, great northern diver, Sabine's gull, puffin, little auk, long-tailed skua, shag and common scoter.</p> <p><i>Fish and marine mammals</i></p> <p>The Scoping Report identifies a number of fish species as being present in or around the site. Site specific surveys of the former East Anglia Zone identified the most abundant species as dab,</p>

---

<sup>1</sup> Commic tern is the term used where an arctic tern and common tern could not be distinguished at distance

plaice and witing, solenette, sand goby, lesser weever and scaldfish. Commercial fish and shellfish species found in the area are detailed in Tables 2.12 to 2.14 of the Scoping Report. Diadromous species in the area include European eel, sea trout, salmon, shads, smelt and river and sea lamprey.

A number of elasmobranch species are present in the area, including spotted ray, blonde ray, small-spotted catshark, thornback ray, common stingray, spurdog, starry smooth hound, common smooth hound and tope.

Harbour porpoise, white-beaked dolphin, bottlenose dolphin, Risso's dolphin, grey seal and harbour seal have all been identified within or around the site.

#### *Commercial fisheries and shipping*

The Proposed Development lies within International Council for the Exploration of the Sea (ICES) statistical rectangles 34F1, 34F2, 34F3, 35F2 and 35F3. The majority of fishing effort is from beam trawlers.

There are two Deep Water Routes which pass close to the offshore array areas and a number of traffic separation schemes are present in the vicinity as shown on Figure 2.15 of the Scoping Report.

#### *Offshore archaeology*

Maritime sites (wrecks and wreckage from prehistory to the present), aviation sites and submerged prehistoric archaeological sites are shown on Figure 2.22 of the Scoping Report.

Within the wind farm array area there are 15 historic records of possible archaeological interest and 61 additional geophysical anomalies of uncertain origin and possible archaeological interest. In the offshore cable corridor there are four historic records of possible archaeological interest and 11 additional geophysical anomalies.

#### *Air space and radar*

The boundary between the London Flight Information Region (FIR) (regulated by the UK Civil Aviation Authority) and the Amsterdam FIR (regulated by the Dutch Aviation Authority) runs to the south east of the Proposed Development.

Helicopter Main Routes (HMRs) 446 and KZ46 (a Dutch HMR) pass through the application site.

#### **Onshore**

There are a number of local, national and internationally designated statutory nature conservation sites within the

	<p>scoping corridor, as shown on Figure 3.11 of the Scoping Report.</p> <p>The Applicant’s Scoping Report does not anticipate transboundary impacts associated with the onshore development. Onshore impacts have therefore not been considered further within this screening document.</p>
<b>Potential impacts and Carrier</b>	<ul style="list-style-type: none"> <li>• Impacts to highly mobile designated/protected species through air or water e.g. disturbance, displacement, loss of habitat, barrier effects, collision mortality and indirect impacts to prey species;</li> <li>• Impacts to foreign commercial fishing fleets and international shipping e.g. displacement and loss of traditional fishing grounds, collision risk and indirect impacts through the displacement of fish species; and</li> <li>• Disturbance impacts to archaeological assets.</li> </ul>
<b>Extent</b>	<p><i>Designated sites</i></p> <p>The Scoping Report does not identify whether designated nature conservation sites within another EEA State would be directly affected by the Proposed Development.</p> <p><i>Birds</i></p> <p>The Scoping Report acknowledges the potential for impacts on birds from other EEA States due to the wide-ranging nature of some seabird species. However, the Scoping Report has not identified any known migration routes or relevant European sites in other EEA States at this stage.</p> <p><i>Fish and marine mammals</i></p> <p>The Scoping Report acknowledges the potential for transboundary impacts on fish and marine mammals given their highly mobile nature, especially with regard to noise and cumulative impacts.</p> <p>The Scoping Report does not specifically identify populations of fish or marine mammals from other EEA States which could be impacted.</p> <p><i>Commercial fisheries and shipping</i></p> <p>The Scoping Report acknowledges the potential for transboundary impacts on vessel routeing and international ports, as well as indirect transboundary impacts if commercial fish species are impacted.</p> <p>The majority of commercial fishing effort in the proposed wind farm site is by Dutch and UK registered fishing vessels. Vessels from Belgium, Denmark, Germany and France may also fish within or around the site.</p>

	<p>A commercial ferry route between Newcastle and Ijmuiden (Amsterdam) operates through the north-east corner of the array area.</p> <p><i>Offshore archaeology</i></p> <p>The Scoping Report acknowledges the potential for transboundary impacts should wrecks of non-British, European nationality be subject to impact; however, the Scoping Report does not identify any non-UK features at this stage.</p> <p><i>Air space and radar</i></p> <p>The Netherlands authorities do not have radar coverage over the proposed wind farm array area; however, the Scoping Report acknowledges the potential for interference within the Amsterdam FIR from wind turbines.</p>
<p><b>Magnitude</b></p>	<p>The magnitude of potential transboundary impacts has not been specifically identified in the Scoping Report at this stage. However, the Scoping Report has identified the potential for transboundary impacts on:</p> <ul style="list-style-type: none"> <li>• offshore ornithology;</li> <li>• fish and shellfish with regard to noise;</li> <li>• marine mammals with regard to noise;</li> <li>• commercial fisheries;</li> <li>• shipping;</li> <li>• offshore archaeology; and</li> <li>• aviation and radar.</li> </ul> <p>These will be assessed further throughout the EIA and mitigation strategies will be considered which may reduce the magnitude of impact.</p>
<p><b>Probability</b></p>	<p>The Scoping Report has not identified the probability of impacts occurring. However, should the Proposed Development proceed, PINS considers the impacts identified by the Applicant are highly likely to occur.</p> <p>The Scoping Report does note that for offshore archaeology, a pre-construction geophysical survey would be undertaken. This would ensure that known archaeological assets are avoided as part of the design process, with the potential for Archaeological Exclusions Zones (AEZs) within the development area.</p> <p>The Scoping Report also notes that mitigation strategies would be developed during the EIA; this may reduce the probability of some impacts.</p>
<p><b>Duration</b></p>	<p>The Scoping Report does not identify the duration of impacts. However, taking into account the nature of the impacts considered by the Applicant, PINS considers the likely duration of impact would be as follows.</p>



	<p><i>Birds</i> Displacement and disturbance due to construction activities would be temporary during the construction phase (approximately four years). During operation, impacts of displacement and disturbance, plus collision risk, would last the lifetime of the wind farm (fifty years).</p> <p><i>Direct impacts to fish, shellfish, marine mammals and indirect impacts to commercial fisheries</i> The potential impacts on fish, shellfish, marine mammals and commercial fisheries which could result from increased noise levels (particularly from piling) would be temporary during the construction phase (approximately four years). Potential impacts during operation due to underwater noise, impacts upon prey species, vessel interaction, loss of habitat, suspended sediments, electromagnetic fields and physical disturbance would last the lifetime of the wind farm (fifty years).</p> <p><i>Shipping, offshore archaeology and aviation and radar</i> Any impacts would likely be long term during both the construction and the operational phase.</p>
<p><b>Frequency</b></p>	<p>The Scoping Report does not identify the frequency of impacts. However, bearing in mind the nature of the impacts considered by the Applicant, PINS considers the likely frequency of impact would be as follows.</p> <p><i>Designated sites and birds</i> Potential impacts are likely to be based on natural patterns of use/migration during construction, operation and decommissioning. Frequency will vary with individual species' seasonal use/migration patterns.</p> <p><i>Fish and marine mammals</i> Potential impacts from disturbance/displacement are likely to be intermittent during construction and decommissioning, when associated with particular activities. Impacts during operation could be more frequent due to the continuous presence of the Proposed Development.</p> <p><i>Commercial fisheries and shipping</i> Potential impacts on commercial fisheries and international vessels are likely to be most frequent during construction and decommissioning due to safety exclusion zones around construction vessels and installation activities.</p> <p>Potential impacts would be frequent during operation due to</p>



	<p>permanent structures obstructing transit routes. Intermittent impacts may also be experienced when maintenance is required and safety zones are applied.</p> <p><i>Archaeology</i></p> <p>Potential impacts are likely to be intermittent during construction and operation.</p> <p><i>Aviation and radar</i></p> <p>Potential impacts are likely to be intermittent during construction and frequent during operation due to permanent structures obstructing air space.</p>
<p><b>Reversibility</b></p>	<p>The Scoping Report does not identify the reversibility of impacts. However, bearing in mind the nature of the impacts considered by the Applicant, PINS considers the likely reversibility of impacts would be as follows.</p> <p><i>Designated sites and birds</i></p> <p>Bird fatalities would not be reversible. Disturbance, displacement and barrier effects may be reversible following decommissioning of the wind farm.</p> <p><i>Fish and marine mammals</i></p> <p>Marine mammal fatalities would not be reversible. Displacement and disturbance may be reversible following decommissioning; however, barrier effects may still remain if foundations are not removed and there could be further impacts on colonising species and their predators if they are removed. The populations of some species may take considerable time to recover from certain impacts.</p> <p><i>Commercial fisheries and shipping</i></p> <p>The loss of fishing ground and shipping routes may be regained once the windfarm site has been decommissioned and the turbines removed. If the turbine foundations are left in-situ this may result in the loss of the fishing ground and shipping routes being irreversible.</p> <p><i>Archaeology</i></p> <p>Disturbance or destruction of assets as a result of the construction would be irreversible.</p> <p><i>Aviation and radar</i></p>

	<p>The loss of the airspace within and around the windfarm site may be regained once the windfarm site has been decommissioned and the turbines removed.</p>
<p><b>Cumulative impacts</b></p>	<p><b>Offshore</b></p> <p>Paragraph 290 of the Scoping Report states that offshore cumulative impacts may come from interactions with the following activities and industries:</p> <ul style="list-style-type: none"> <li>• Other wind farms;</li> <li>• Aggregate extraction and dredging;</li> <li>• Licensed disposal sites;</li> <li>• Navigation and shipping;</li> <li>• Commercial fisheries;</li> <li>• Sub-sea cables and pipelines;</li> <li>• Potential port/harbour development; and</li> <li>• Oil and gas activities.</li> </ul> <p>Section 2.17 of the Scoping Report identifies the following proposed wind farms which are located in the former East Anglia Zone and will also be considered in the cumulative impact assessment:</p> <ul style="list-style-type: none"> <li>• East Anglia ONE (consented);</li> <li>• East Anglia THREE (in determination);</li> <li>• Norfolk Vanguard (scoping request submitted in October 2016, Scoping Opinion issued November 2016);</li> <li>• East Anglia ONE North (not yet submitted a request for a Scoping Opinion); and</li> <li>• East Anglia TWO (not yet submitted a request for a Scoping Opinion).</li> </ul> <p>The Scoping Report states that the cumulative impacts assessment will also include wider offshore wind farms (OWFs), where appropriate; however, these have not been identified at this stage.</p> <p>No other offshore plans or projects have been specifically identified within the Scoping Report.</p> <p><b>Onshore</b></p> <p>Paragraph 291 of the Scoping Report identifies the following onshore plans or projects that may be considered within the cumulative impact assessment:</p> <ul style="list-style-type: none"> <li>• other offshore wind farm infrastructure;</li> <li>• other energy generation infrastructure;</li> <li>• building/housing developments;</li> </ul>

	<ul style="list-style-type: none"> <li>• installation or upgrade of roads;</li> <li>• installation or upgrade of cables and pipelines;</li> <li>• coastal protection works (location not specified); and</li> <li>• National Grid works.</li> </ul> <p>No onshore plans or projects have been specifically identified within the Scoping Report at this stage.</p>
--	--

**Transboundary screening undertaken by the Inspectorate on behalf of the SoS**

Under Regulation 24 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (the 2009 EIA Regulations) and on the basis of the current information available from the Applicant, the Inspectorate is of the view that the Proposed Development **is likely** to have a significant effect on the environment in another EEA State.

In reaching this view the Inspectorate has applied the precautionary approach (as explained in its Advice Note Twelve: Transboundary Impacts), and taken into account the information currently supplied by the Applicant.

**Action:**

Transboundary issues notification under Regulation 32 of the 2017 EIA Regulations is required.

**States to be notified:** Belgium, Denmark, France, Germany and Netherlands – due to potential impacts on commercial fisheries, shipping and navigation and aviation and radar.

The Scoping Report has identified potential impacts on birds, fish, mammals and archaeological interests but has not at this stage identified European sites in other EEA states to which these could be associated.

**Date:** 21 July 2017

**Note:** The SoS’ duty under Regulation 24 of the 2017 EIA Regulations continues throughout the application process.

**SECOND TRANSBOUNDARY SCREENING - for the purposes of Regulation 32 of the 2017 EIA Regulations**

<b>Document(s) used for transboundary Screening:</b>	Norfolk Boreas Offshore Wind Farm Environmental Impact Assessment (June 2019) (Environmental Statement (ES)) Information to Support Habitat Regulations Assessment (June 2019) (HRA Report)
<b>Date screening undertaken:</b>	Re-screened on 21 August 2019 after submission of the application documents on 11 June 2019

**Transboundary re-screening undertaken by the Inspectorate on behalf of the SoS**

Following submission of the DCO application which included the Environmental Statement and the Applicant’s HRA report, the Inspectorate has reconsidered the transboundary screening decision made on 21 July 2017.

The first transboundary screening dated 21 July 2017 was completed under Regulation 24 of the 2009 EIA Regulations. On 16 May 2017 the 2017 EIA Regulations came into force.

Although the Applicant requested the SoS to adopt a scoping opinion in respect of the development to which the screening relates prior to 16 May 2017, it opted to prepare its ES in accordance with the requirements of the 2017 EIA Regulations. The 2017 EIA Regulations are therefore considered to be applicable for the purposes of this transboundary screening.

The Inspectorate notes that changes have been made to the Proposed Development since the previous transboundary screening decision was made and has therefore had regard to the following matters that differ from those considered at the time of that previous decision.

#### **Changes to the description of the Proposed Development:**

- the estimated operational life of the Proposed Development has increased from 25 years to 30 years;
- the maximum number of turbines has been reduced from 257 to 180;
- minor adjustments and refinements have been made to the wind turbine design, foundations and layout (hub height, tip height, removal of floating foundation option etc.);
- minor adjustments and refinements have been made to onshore and offshore cables, corridors and associated link box and jointing pits locations and parameters;
- the maximum interconnector length (linking offshore electrical platforms within the site) has increased from 40km to 90km, to be laid within 60km of trenching;
- a maximum of 10 project interconnector cables offshore between Norfolk Boreas and Norfolk Vanguard are now proposed, comprising of up to 120km of cable within 92km of trench);
- addition of two meteorological masts with a max height of 200m;
- reduced number of electrical platforms and onshore cables, ducts and transmission pits from 6 to 2;
- addition of a maximum of two LiDAR and wave buoys and a number of navigational buoys;
- location of the landfall is now defined as Happisburgh South;
- long HDD has been confirmed as the preferred option at the landfall to avoid work or vehicular access to the beach and cliffs;
- the footprint of the onshore construction compound has been determined as 200m x 100m and will accommodate offices, welfare facilities, car parking, workshops and storage areas;
- a temporary works area of 100m x 100m will be required at Spicer's Corner on the A47;
- the footprint of the Necton substation extension is now presented as being 200m x 150m; and
- the report confirms that only HVDC cabling will be used removing the need for a relay station for HVAC.

The Applicant presents information on potential transboundary impacts in ES Chapters 8 to 18, with a summary provided in Chapter 32 – Offshore Cumulative and Transboundary Assessment. The Applicant's conclusions are:

- **Chapter 8 'Marine Geology, Oceanography and Physical Processes':** The ES concludes that impacts on marine geology, oceanography, and physical processes are unlikely to occur or are unlikely to be significant and has scoped an assessment

of transboundary impacts for this aspect out of the ES.

- **Chapter 9 'Marine Water and Sediment Quality':** The ES concludes that the localised nature on the marine water and sediment quality means that transboundary impacts are unlikely and has scoped an assessment of transboundary impacts for this aspect out of the ES.
- **Chapter 10 'Benthic and Intertidal Ecology':** The ES concludes that the localised nature on the benthos means that transboundary impacts are unlikely and has scoped an assessment of transboundary impacts for this aspect out of the ES.
- **Chapter 11 'Fish and Shellfish Ecology':** The ES explains that the distribution of fish and shellfish species is independent of national geographical boundaries therefore the assessment accounts for the distribution of fish stocks and populations regardless of political limits; therefore transboundary effects have been scoped out of the ES. Any cumulative effects regarding physical disturbance and permanent/temporary loss of habitat, increased suspended sediment and deposition, underwater noise, introduction of hard substrate, EMFs and changes in fishing activities were found to be not significant.
- **Chapter 12 'Marine Mammals':** The ES notes that marine mammals are highly mobile and confirms that the potential for transboundary impacts has been addressed by considering reference populations and potential linkages to non-UK sites. The reference populations include waters in Netherlands, Germany, France, Belgium, Sweden and Denmark. No significant effects have been identified.
- **Chapter 13 'Offshore Ornithology':** . The ES explains that Rijkswaterstaat (in the Netherlands) had noted in its response to the preliminary environmental information that consideration should be given to proposed wind farm developments in the Netherlands with respect to displacement impacts. However, the ES states that the scale of operational offshore wind farms in Belgium, Netherlands and Germany is such that their inclusion would be very unlikely to alter the conclusions. The ES identifies protected sites beyond the UK that may have connectivity with Norfolk Boreas, however concludes no significant effects on offshore ornithology.
- **Chapter 14 'Commercial Fisheries':** The ES identifies that the Proposed Development area is fished to varying degrees by Belgian, Dutch, Danish, French and German fishing vessels. The assessment of potential transboundary impacts is integrated in the commercial fisheries impact assessment. It concludes that on commercially exploited populations, loss or restricted access to fishing grounds, safety issues, increased steaming times, obstacles on the seabed, interference with fishing activities or displacement are not likely to be significant.
- **Chapter 15 'Shipping and Navigation':** The ES notes the potential for transboundary effects with regard to shipping and navigation. The ES notes that the Proposed Development could have an effect on commercial shipping routes, international ports, shipping routes and/or routes affected by other international offshore renewable energy developments on the following EEA States: Netherlands, Denmark, Belgium and Germany. However, no significant effects have been identified.
- **Chapter 16 'Aviation and Radar':** The ES identifies potential transboundary impacts relating to helicopter main routes between the UK and Netherlands, and the charting, lighting and marking of wind turbines and radar operations based in Netherlands and Belgium. These were assessed as being not significant.
- **Chapter 17 'Offshore Archaeology and Cultural Heritage':** With regards to transboundary impacts as a result of changes to marine physical processes, the ES concludes that tidal ellipses show all movement is in a north south direction; an assessment of transboundary impacts from such changes has therefore been scoped out. With regards to transboundary impacts to known and potential heritage assets

such as non-British wrecks or aircraft, these were assessed to be not significant.

- **Chapter 18 'Infrastructure and Other Users':** As agreed with the SoS in the Scoping Opinion, transboundary impacts have been scoped out of this Chapter
- **Onshore chapters:** No transboundary impacts were identified for the onshore environment aspect chapters (ES Chapters 18 to 31).

The Applicant's HRA Report also considers transboundary effects on non-UK Natura 2000 sites. It identifies a likely significant effect from underwater noise (disturbance) to foraging grey and harbour seal of Klaverbank SAC and to foraging grey seal of Noordzeekustzone SAC, both of which are Natura 2000 sites located in the Netherlands. However it concludes there would be no adverse effect on the integrity of these sites.

The Applicant's ES and HRA Report conclude that there would be no significant effects to the environment of the other EEA States that were identified as being potentially affected in the Inspectorate's first transboundary screening (Belgium, Denmark, France and Germany).

### **Conclusion:**

No new EEA States have been identified as being likely to have significant effects on their environment.

Under Regulation 32 of the 2017 EIA Regulations and on the basis of the current information available from the Applicant, there is a change to the previous conclusion. The Inspectorate is now of the view that the Proposed Development **is likely** to have a significant effect on the environment of the Netherlands only, due to potential impacts on marine mammals.

In reaching this view the Inspectorate has applied the precautionary approach (as explained in its Advice Note twelve: Transboundary Impacts); and taken into account the information currently supplied by the Applicant.

### **Action:**

Consultation letters will be sent to those EEA States who responded to the previous notification under Regulation 24 of the 2009 EIA Regulations and asked to participate in the procedure (Belgium, France, Germany and the Netherlands).

**States to be consulted:** Belgium, France, Germany and the Netherlands.

**Date:** 21 August 2019

**Note:** The SoS' duty under Regulation 32 of the 2017 EIA Regulations continues throughout the application process.

### **Note:**

The Inspectorate's screening of transboundary issues is based on the relevant considerations specified in the Annex to its Advice Note Twelve, available on our website at <http://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>