Transboundary screening undertaken by the Planning Inspectorate (PINS) on behalf of the Secretary of State (SoS)		
Project name:	Thanet Extension Offshore Wind Farm	
Address/Location:	8km from the Isle of Thanet with onshore connections to the east coast of Kent.	
Planning Inspectorate Ref:	EN010084	
Date(s) screening undertaken:	First Screening – 7 July 2017 following the Applicant's request for a scoping opinion.	
	Second Screening – 15 August 2018 after the submission of the application documents on 27 June 2018 and the Secretary of State's decision to accept the Application for examination on 23 July 2018	
EEA States identified for notification:	First Screening: The Netherlands, Belgium, France, Germany and Denmark	
	Second Screening: No new EEA States identified	

FIRST TRANSBOUNDARY SCREENING UNDERTAKEN BY THE SECRETARY OF STATE	
Document(s) used for transboundary Screening:	Thanet Extension Offshore Wind Farm Environmental Impact Assessment Report to Inform Scoping ('the Scoping Report') (December 2016)
Screening Criteria:	PINS Comments:
Characteristics of the Development	The Proposed Development is for an offshore generating station (wind farm) with a total generating capacity of up to 340MW.
	The offshore area of the Proposed Development is approximately 70km^2 and surrounds the existing operational Thanet Offshore Wind Farm (TOWF) (100 no. 3MW turbines) as shown in Figure 1.1 of the Scoping Report.
	Offshore
	The key offshore structures proposed include:
	 up to 34 no. turbines (each with a generating capacity of up to 10MW, maximum height of 210m and maximum blade diameter of 180m);
	 inter-array subsea cables between the turbines (approx. 80km of cabling);
	 high voltage alternating current (HVAC) subsea export cables to the shore (66kV or 132kV/220kV) (approx. 20-

- 25km cable length) with fibre optic cabling for system control and data acquisition (SCADA);
- an offshore substation platform (if required, depending on export cable option);
- mattresses or other protective substrate associated with cable crossings (if required); and
- scour protection around foundations and export cables (if required).

The foundation types for the offshore structures are yet to be determined but the options under consideration include;

- monopiles;
- three-legged jackets (pin piles or suction caisson anchoring); and
- four-legged jackets (pin piles or suction caisson anchoring).

It is possible that more than one type of foundation would be used for the offshore structures.

Array cables are likely to be installed using either water jetting or ploughing technique. The installation methods for the export cables also include these options as well as a cable injector installation method.

Burial depths for the offshore cables would be subject to a detailed burial risk assessment but is likely to be located c.1-3m below the seabed.

A description of the Proposed Development's offshore components is provided at Section 1.4.1 of the Scoping Report.

Onshore

Up to four export cables will be brought ashore at the landfall location through either open trenching or horizontal directional drilling (HDD) techniques. Up to 7km of onshore cabling will be required per cable, depending on the landfall option chosen. Transition pits will be required to connect the onshore and offshore cabling with up to four onshore trenches required to take the export cables inland to the substation. Jointing pits will also be required at regular intervals along the cable route (approximately every 500-1000m).

The cables will connect to a new 400kV substation located within a 200m x 130m compound (including associated buildings) at Richborough.

A description of the Proposed Development's onshore components is provided at Section 1.4.3 of the Scoping Report.

Construction, Operation and Decommissioning

Onshore enabling works are due to commence from 2020 onwards. The installation of landfall ducts, cables and substation plant is expected to commence in 2021. Offshore construction is also expected to commence in 2021.

	The Proposed Development will be decommissioned at the end of its operational lifetime. The Scoping Report does not specifically state what the expected operational lifetime of the Proposed Development is.
Geographical area	The extent of the area of likely impact under the jurisdiction of another EEA State is not specifically provided in the Scoping Report.
	Offshore
	The offshore area of the Proposed Development is located 8km from the Isle of Thanet off the Kent coast and surrounds the existing TOWF which has been operational since 2010. The offshore export cable extends approximately 20-25km in a westerly direction to the Kent coast where there are currently two landfall options at Pegwell Bay or Sandwich Bay. Figure 1.1 of the Scoping Report shows the offshore array, export cable routes and landfall locations being considered.
	There are also other users and features of the marine environment in proximity to the Proposed Development's offshore area including:
	 deep water shipping routes and other navigational features;
	 other offshore wind farm developments;
	aggregate dredging;
Location of	 oil and gas exploration and development;
Development	military practice areas;
(including existing	subsea cabling; and
use)	known shipwrecks.
	Such features are shown on Figures 2.9 – 2.13 of the Scoping Report.
	The Nemo link, an electrical interconnector between the UK and Belgium, has been consented and will intersect within the Proposed Development's export cable corridor once constructed. Further, the Nemo Link's UK landfall location will be at Pegwell Bay.
	The Scoping Report does not specify the distances between the Proposed Development and any other EEA States.
	Onshore
	The Scoping Report contains two onshore cable route corridor options (dependent on the landfall options at Pegwell Bay or Sandwich Bay) as shown on Figure 1.2 of the Scoping Report.
	Both cable route options extend from the from the respective landfall locations to the point of the proposed connection to the National Grid at the Richborough substation site as follows:

- Pegwell Bay landfall: cable route will likely run parallel to Sandwich Road (although an alternative route may be necessary). The Scoping Report does not identify any land uses for the onshore cable route for this landfall option; and
- Sandwich Bay landfall: cable to be routed along Guilford Road before heading north across Sandwich Haven and requiring a crossing under the River Stour via HDD.

The expected grid connection point and infrastructure required at the substation are only defined in high level in the Scoping Report. The proposed substation location is shown on Figure 1.2 and includes land:

- occupied by an existing UK Power Networks substation;
- where the NEMO link converter station is currently under construction; and
- where a new National Grid Grid Supply Point (GSP) substation would be constructed.

Offshore

Paragraph 205 of the Scoping Report states that offshore cumulative impacts may come from interactions with the following activities and industries:

- other wind farms;
- aggregate extraction and dredging;
- licensed disposal sites;
- navigation and shipping;
- commercial fisheries;
- sub-sea cables and pipelines;
- potential port / harbour development; and
- oil & gas activities.

In the context of the Infrastructure and Other Users section of the Scoping Report, Table 2.25 and Figure 2.12 list the nearest offshore wind farm developments as:

- TOWF;
- London Array;
- Kentish Flats and Kentish Flats Extension;
- Gunfleet Sands I, II & Demo;
- Greater Gabbard;
- Galloper; and
- East Anglia Zone.

Paragraph 664 of the Scoping Report explains that a screening process will be undertaken by the Applicant, in consultation with key stakeholders during the EIA process, to identify

Cumulative impacts

	projects or plans that have the potential for cumulative impacts with the Proposed Development.
	Onshore
	Onshore plans or projects that may be considered as part of the Applicant's cumulative impact assessment would include (but are not limited to):
	 other energy generation infrastructure;
	 building/housing developments;
	 installation or upgrade of roads, cables and pipelines;
	 coastal protection works; and
	National Grid enabling works.
	The Scoping Report does not set out specific plans or projects to be included in the onshore cumulative impact assessment.
	As per paragraph 664 in relation to offshore cumulative effects, paragraph 1009 describes the same process being applied to the consideration of plans and projects relevant to the onshore cumulative impact assessment.
Carrier	 Impacts to highly mobile designated/protected species through air or water eg. Disturbance, displacement, loss of habitat, barrier effects, collision mortality and indirect impacts to prey species;
	 Impacts to foreign commercial fishing fleets and international shipping eg. Displacement and loss of traditional fishing grounds, collision risk and indirect impacts through the displacement of fish species; and
	 Impacts upon known and / or previously unrecorded archaeological assets.
	Offshore
	Designated sites (Section 2.15 of the Scoping Report)
	The Proposed Development's offshore area lies within the Southern North Sea proposed Special Area of Conservation (pSAC).
	The offshore area also lies within approximately 10km of:
	 Thanet Coast Special Area of Conservation (SAC);
Environmental Importance	 Margate and Long Sands Site of Community Importance (SCI);
	 Outer Thames Estuary Special Protection Area (SPA);
	 Outer Thames Estuary potential SPA (pSPA);
	 Thanet Coast SPA and Ramsar sites (nb the export cable and onshore cable routes pass through these sites);
	Thanet Coast Site of Special Scientific Interest (SSSI);
	Thanet Coast Marine Conservation Zone (MCZ); and

• Goodwin Sands recommended MCZ (rMCZ).

The offshore area also lies within 20km of the following sites:

- Sandwich Bay SAC;
- Sandwich Bay to Hacklinge Marshes SSSI; and
- Sandwich and Pegwell Bay National Nature Reserve (NNR).

The offshore export cable and onshore cable routes passthrough these sites.

The Proposed Development's export cable corridor runs through the Kent North coastal water body as designated in accordance with the Water Framework Directive (WFD).

These designated sites are shown on Figures 2.14, 2.15 and 2.16 of the Scoping Report and described further in Section 2.15 of the Scoping Report.

<u>Benthic and Intertidal Ecology (Section 2.5 of the Scoping Report)</u>

Large aggregations of Sabellaria spinulosa reef communities are known to be within the TOWF site area and are a listed habitat under Annex I of the Habitats Directive. There are also a number of UK Biodiversity Action Plan (UKBAP) habitats of principal importance within the area of the Proposed Development including:

- mud habitats;
- s. spinulosa reefs;
- subtidal sands and gravels;
- subtidal chalk;
- peat and clay exposures; and
- coastal vegetated shingle.

Fish and shellfish (Section 2.6 of the Scoping Report)

The Scoping Report identifies a number of fish species as being present in or around the Proposed Development's offshore area. Site surveys undertaken for the TOWF identified; lesser spotted dogfish; plaice; dabs; bib; dover sole and lemon sole.

Seven species of elasmobranch were found in the Proposed Development's offshore area; starry-smooth hound; thornback ray; lesser spotted dogfish; spotted ray; tope and thresher shark. The Scoping Report sets out that the Proposed Development area itself was not deemed an important spawning ground or nursery area for commercially important fish species.

Shellfish relevant to the Proposed Development includes lobster and crab in the area of the proposed wind turbines (and existing TOWF turbines) and cockles in the export cable route corridor.

Marine mammals (Section 2.7 of the Scoping Report)

The Proposed Development's offshore area lies within the Southern North Sea pSAC, proposed to be designated for harbour porpoise populations.

The Scoping Report notes a number of cetaceans as being present in the southern North Sea; however, harbour porpoise were the only cetacean species to be recorded during surveys for TOWF. In relation to pinnepeds, the Scoping Report notes that there has been sightings of both grey and harbour seal in the TOWF area.

<u>Ornithology – offshore (Scoping Report Section 2.8)</u>

In relation to sea birds, the Scoping Report identifies the Outer Thames Estuary SPA (wintering red-throated diver), Outer Thames Estuary pSPA (terns), Foulness SPA and Minsmere to Walberswick SPA (terns) as having potential connectivity to the Proposed Development's offshore area.

In addition, the Alde-Ore SPA has potential connectivity for breeding lesser black-backed gulls and the Flamborough Head and Filey Coast pSPA (including Flamborough Head and Bempton Cliffs SPA) for breeding kittiwake and gannet.

Red-throated diver, common gull, lesser black-backed gull. Herring gull, kittiwake, guillemot, razorbill, northern fulmar, gannet, sandwich tern and common tern were all recorded during surveys of TOWF and therefore are assumed to be an important consideration in respect of the Proposed Development. Other seabirds and sea ducks recorded include; common scoter, eider, black-throated diver, little gull, black-headed gull, Artic skua, great skua, cormorant and shag.

Commercial fisheries (Section 2.9 of the Scoping Report)

The Scoping Report notes that the Proposed Development is located within the International Council for the Exploration of the Sea (ICES) statistical block 31F1 sub-square 2 which is in the jurisdiction of Kent and Essex Sea Fisheries Inland Fisheries Conservation Authority (KEFICA).

Seven fishing ports are located in an area with potential access to the Proposed Development's offshore area. The main ports amongst the seven are; Ramsgate, Folkstone and Whitstable. Species landed include: eels; sole; plaice; thornback ray; cod; herring; sprat bass and spurdog. Shellfish include; lobster; king scallop; brown crab; whelk and oyster.

Shipping and navigation (Section 2.10 of the Scoping Report)

The Scoping Report references Dutch, Belgian and French fishing vessels in addition to the English fleet using the Proposed Development's offshore area. In addition to these, the Proposed Development's offshore area is also used by recreational vessels, cargo vessels, tankers, dredger vessels and commercial ferries.

The Scoping Report notes that there are high levels of vessel

traffic in the area, some of which requires piloting for safe access in and out of the ports.

The Kent coastal area to the west of the Proposed Development's offshore area is classified as a Marine Environmental High Risk Area (MEHRA) due to environmental sensitivity and high risk of pollution from ships. All of the waters in the Proposed Development's study area (as defined by the Applicant) are classified as Particularly Sensitive Sea Areas (PSSAs) by the International Maritime Organisation (IMO) because of their need for special protection due to recognised ecological, socio-economic or scientific reasons which may be vulnerable to damage by international maritime activities.

Offshore archaeology and cultural heritage (Section 2.11 of the Scoping Report)

Around the Proposed Development's offshore area, over 25 live wrecks have been found. Figure 2.10 of the Scoping Report shows the location of wrecks and obstructions in relation to the Proposed Development.

Aviation and Radar (Section 2.13 of the Scoping Report)

NATS and the Ministry of Defence (MOD) operate radar systems which may be affected by the Proposed Development. Manston Airport is the closest airport (30km); however, this is currently not operating. The closest operational airport is Southend airport (63km). The Maritime and Coastguard Agency (MCA) and Port of London Authority (PLA) operate two radars in the vicinity of the Proposed Development.

Military Practice Area X5122, used by the Royal Navy, overlaps with the Proposed Development's offshore area. Firing practice area x5123 is located south of the Proposed Development; this is also a mine disposal area.

The Scoping Report does not identify any overlap between the Proposed Development and aviation and radar operated by other European countries.

<u>Infrastructure and Other Users (Section 2.14 of the Scoping</u> Report)

Figure 2.12 shows the locations of other wind farms. Figure 2.13 illustrates locations of disposal sites, aggregate application and licence areas and subsea cables. The Proposed Development's offshore export cable corridor crosses two inservice telecommunications cables. There are cables operated by BT that would also need to be crossed. To the west of the Proposed Development's offshore area lie two further out-of-use cables which would not require crossing.

Aggregate dredging takes place 24km north of the Proposed Development and therefore the Applicant identifies that shipping and navigation to and from the Proposed Development's offshore area will require further consideration.

Onshore

The Scoping Report identifies a number of nationally and internationally designated ecological sites within proximity of the Proposed Development's onshore area as described above and shown on Figure 3.6 of the Scoping Report.

Ecology / Ornithology (Sections 3.6 and 3.7 of the Scoping Report)

Table 3.8 of the Scoping Report describes the relevant features of the designated sites identified by the Applicant.

References are made to ornithological data collected from a walkover survey undertaken for TOWF, noting that 50 different bird species have been identified within a study area 1km either side of the cable route. The Scoping Report does not set out a full list of the species found; however, it is noted that Schedule 1 to the Wildlife and Countryside Act 1981 species found include Cetti's warbler, peregrine and hobby falcons. Table 3.13 of the Scoping Report sets out the Birds of Conservation Concern noted within the onshore area of interest.

The Applicant's Scoping Report does not anticipate transboundary impacts associated with any of the onshore topics in relation to the Proposed Development. Onshore impacts have therefore not been considered further within this screening document.

Designated sites

The Scoping Report does not identify whether designated nature conservation sites within another EEA State would be directly affected by the Proposed Development.

Benthic Ecology

On the basis of the localised and small scale nature of the impacts on benthos, the Applicant considers that impacts on other EEA States are unlikely in this context (parargraph 309 of the Scoping Report).

Ornithology

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.

Fish and shellfish

The Scoping Report acknowledges the potential for transboundary impacts on fish and shellfish, specifically as a result of development also taking place in waters of other European States, but does not identify which EEA States could be affected.

Marine mammals

The Scoping Report acknowledges the potential for transboundary impacts on marine mammals, noting the level of development being undertaken in the north sea and given their

Extent

highly mobile nature. The Applicant recognises potential for transboundary impacts with Belgium, the Netherlands, Germany and Denmark (paragraph 374 of the Scoping Report). Commercial fisheries The Scoping Report recognises the potential for transboundary impacts upon fisheries specifically in relation to Dutch, Belgian and French vessels and potential for displacement as a result of the Proposed Development. Commercial shipping The Scoping Report does not make reference to impact on shipping (of any type) which originates from another European State being affected. It does, however, note that the location of European wind farm developments would be considered in relation to vessel routing or international ports. Marine archaeology and cultural heritage The Scoping Report sets out that where non-British wrecks are located, this will be considered further as part of the EIA process. Aviation and radar Due to the location of operating airports in relation to the Proposed Development, it is not considered that air space conflicts would result in a significant impact. The Scoping Report deems conflicts with radar unlikely. However, the Applicant intends to consult with relevant Dutch and French aviation stakeholders. Infrastructure The Scoping Report notes that there is little possibility of impact as impacts rely on physical overlap. 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: fish and shellfish; marine mammals; offshore ornithology; Magnitude commercial fisheries; shipping and navigation; aviation and radar; and offshore archaeology and cultural heritage. These will be assessed further throughout the EIA and mitigation strategies will be developed which may reduce the magnitude or occurrence of impact. The Scoping Report has not identified the probability of impacts **Probability** occurring. However, should the Proposed Development

	proceed, PINS considers the impacts identified by the Applicant would be difficult to avoid and therefore are considered highly likely to occur.
	The Scoping Report does note that for offshore archaeology, known features would be avoided and Archaeological Exclusions Zones (AEZs) applied within the Proposed Development area.
	The Scoping Report also notes that mitigation strategies would be developed during the EIA; this may reduce the probability of some impacts occurring, and / or the magnitude of those impacts.
Duration	The Scoping Report does not specifically identify the duration of impacts. The operational life of the Proposed Development is not stated but Table 1.1 of the Scoping Report describes that onshore and offshore construction will commence in Q4 2020 and Q1 2021 respectively with commissioning of the Proposed Development in Q4 2021.
	Taking into account the nature of the impacts considered by the Applicant, PINS considers the likely duration of impact would be as follows:
	<u>Ornithology</u>
	Displacement and disturbance due to construction activities would be temporary during the construction phase. During operation, impacts of displacement and disturbance, plus collision risk, would last for the lifetime of the Proposed Development.
	<u>Direct impacts to fish, shellfish, marine mammals and indirect impacts to commercial fisheries</u>
	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. Potential impacts during operation due to underwater noise, impacts upon prey species, vessel interaction, loss of habitat, suspended sediments, electromagnetic fields (EMF) and physical disturbance would last for the lifetime of the Proposed Development.
	Shipping, offshore archaeology and cultural heritage and
	aviation and radar
	Any impacts would likely be long term during both the construction and the operational phase.
Frequency	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.
	<u>Designated sites and ornithology</u>
	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.

Fish and marine mammals

Potential impacts from disturbance/displacement are likely to be intermittent during construction and decommissioning, when associated with particular activities. Impacts could be more frequent during operation due to the generation of underwater noise, impacts upon prey species, vessel interaction, loss of habitat, suspended sediments, EMF and physical disturbance, which could last for the lifetime of the Proposed Development.

Commercial fisheries and shipping and navigation

Potential impacts on commercial fisheries and international vessels are likely to be most frequent during construction and decommissioning due to the likely implementation of safety exclusion zones around construction vessels and installation activities. Intermittent impacts may be experienced during operation when maintenance is required and safety zones are applied.

Offshore Archaeology and cultural heritage

Potential impacts are likely to be intermittent during construction and operation.

Aviation and radar

Potential impacts are likely to be intermittent during construction and frequent during operation due to permanent structures obstructing air space.

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:

Designated sites and ornithology

Bird fatalities would not be reversible. Disturbance, displacement and barrier effects may be reversible following decommissioning of the Proposed Development.

Fish and marine mammals

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.

Commercial fisheries and shipping

The loss of fishing ground and shipping routes may be regained once the Proposed Development 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.

Reversibility

Offshore Archaeology and cultural heritage

Disturbance or destruction of assets as a result of the construction would be irreversible.

Aviation and radar

The loss of the airspace within and around the Proposed Development's offshore area may be regained once the Proposed Development has been decommissioned and the turbines removed.

Transboundary screening undertaken by the Secretary of State

The transboundary screening of the Proposed Development has been considered taking into account the transitional provisions in Regulation 37 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 2017 EIA Regulations). The Applicant has requested the SoS to adopt a scoping opinion in respect of the development to which the screening relates prior to 16 May 2017 (the date of the commencement of the 2017 EIA Regulations). The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (the 2009 EIA Regulations) are therefore considered to be the applicable EIA Regulations.

Under Regulation 24 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (the EIA Regulations) and on the basis of the current information available from the applicant, PINS 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 PINS has applied the precautionary approach (as explained in the Planning Inspectorate's Advice Note 12: Transboundary Impacts Consultation); and taken into account the information currently supplied by the applicant.

Action:

Transboundary issues notification under Regulation 24 of the EIA Regulations is required.

States to be notified:

The Netherlands, Belgium, France, Germany and Denmark

Date: 7 July 2017

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

SECOND TRANSBOUNDARY SCREENING	
Document(s) used for transboundary Screening:	Environmental Statement (Doc Ref. 6.1.1 – 6.6.21 inclusive) dated June 2018 and Report to Inform Appropriate Assessment (Doc Ref. 5.2, 5.2.1 and 5.2.2)dated June 2018
Date screening undertaken:	Re-screened on 15 August 2018 after the submission of the application documents on 27 June 2018 and the Secretary of State's decision to accept the Application for examination on 23 July 2018.
Transboundary re-screening undertaken by the Inspectorate on behalf of the SoS	
Following submission of the DCO application which included the Environmental Statement	

(ES) and the Applicant's Report to Inform Appropriate Assessment (HRA Report), the Inspectorate has reconsidered the transboundary screening decision made on 7 July 2017.

The first transboundary screening dated 7 July 2017 was completed under Regulation 24 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (the 2009 EIA Regulations).

On 16 May 2017 the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 2017 EIA Regulations) came into force. Although the Applicant requested the SoS to adopt a scoping opinion in respect of the Proposed 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:

Change in the description of the Proposed Development

The design of the Proposed Development has evolved during the Applicant's iterative process. Alterations to the Proposed Development since the first transboundary screening have been made and include:

- A meteorological mast forms part of the description of the Proposed Development in the ES, but was not specifically referenced in the Scoping Report. A maximum of one meteorological mast may be required by the Proposed Development, and would have a maximum elevation equivalent to the maximum hub height of the wing turbine generators;
- 'Measuring equipment' consisting of up to one LiDAR device and up to one wave buoy form part of the description of the Proposed Development in the ES, but were not specifically referenced in the Scoping Report;
- The preferred size for wind turbine generators has increased from 8 10MW in the Scoping Report, to 8 – 12MW in the ES, which has in turn increased the maximum rotor diameter from 180m to 220m, and the maximum tip height from 210m to 250m;
- The maximum hub height of the wind turbine generators given in the Scoping Report is 125m. No maximum hub height of wind turbine generators is given in the ES, but this is noted at 140m in the draft DCO;
- The proposed landfall location options presented in the Scoping Report have been refined and there are now three design options noted in the ES for the landfall type and cable works at the Pegwell Bay location only, with the final of the 3 options to be confirmed subject to conclusion of detailed site investigation work; and
- The proposed number and dimensions of trenches to be laid for the onshore cable corridor have been refined since the Scoping Report. The ES notes that four separate trenches will be laid, with indicative dimensions of 1.2m depth and 1m width (within a 30m temporary construction corridor width).

Offshore Chapters:

• **Volume 2, Chapter 2 – Physical Processes:** The ES concludes that predicted changes to key physical process pathways such as tides, waves and sediment transport arising from the Proposed Development are not anticipated to be sufficient to influence identified receptors, and as such no transboundary effects are identified.

- Volume 2, Chapter 3 Marine Water and Sediment Quality: The ES concludes
 that there are no significant effects on marine water and sediment quality from the
 Proposed Development, and no transboundary impacts are predicted.
- Volume 2, Chapter 4 Offshore Ornithology: The ES assesses potential
 transboundary effects through an evaluation of concentration of non-breeding
 seabirds and seabird breeding colonies in adjacent EEA states, and concludes no
 significant effects on offshore ornithology. The Applicant explains that they have had
 regard to responses received from French authorities detailing potential concern
 about seabirds, but the assessment identified no significant adverse effects as a
 result of the Proposed Development.
- Volume 2, Chapter 5 Benthic Subtidal and Intertidal Ecology: The ES
 concludes that there are no significant effects on benthic subtidal and intertidal
 ecology from the Proposed Development, and no transboundary impacts are
 predicted.
- **Volume 2, Chapter 6 Fish and Shellfish:** The ES concludes that there are no significant effects on fish and shellfish from the Proposed Development, and no transboundary impacts are predicted.
- Volume 2, Chapter 7 Marine Mammals: The ES acknowledges the potential for significant transboundary impacts on marine mammals due to their highly mobile nature and population scale, as well as the large extent of marine mammal management units. It assesses potential impacts such as underwater noise, long term physical loss of habitat, collision risk, accidental pollution and changes in prey availability, and concludes that there is potential for moderate adverse cumulative effects on the harbour porpoise population in terms of underwater noise arising from the construction and decommissioning of the Proposed Development. The HRA Report also identifies potential for likely significant effects to transboundary sites for harbour porpoise, harbour seal and grey seal resulting from underwater noise arising from the construction and decommissioning of the Proposed Development, and identifies France, Belgium and the Netherlands in this regard.
- Volume 2, Chapter 8 Offshore Designated Sites: Potential transboundary impacts on offshore designated sites are assessed in the HRA Report, which identifies a number of sites for assessment in France, Belgium and the Netherlands but concludes that there are no adverse effects on the integrity of sites or features from the Proposed Development, alone or in-combination.
- Volume 2, Chapter 9 Commercial Fisheries: The ES identifies that the 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 assessment within the ES. It concludes that impacts on commercially exploited populations, loss or restricted access to traditional fishing grounds, safety issues, increased steaming times, obstacles on the seabed, interference with fishing activities or displacement are not likely to be significant in a transboundary context, with only the impact on UK drift and static netters during operation deemed to be potentially significant.
- Volume 2, Chapter 10 Shipping and Navigation: The ES acknowledges that vessels of many nationalities will transit in the area of the Proposed Development, but that these will be subject to international regulations, or local regulations when in territorial or port waters. The assessment of potential transboundary impacts is integrated in the shipping and navigation assessment within the ES, which concludes no significant effects from the Proposed Development, alone or cumulatively.
- Volume 2, Chapter 11 Offshore Infrastructure: The ES concludes that there

are no significant effects on offshore infrastructure from the Proposed Development, and no transboundary impacts are predicted.

- Volume 2, Chapter 12 Seascape, Landscape and Visual Impact
 Assessment: The ES identifies the potential for transboundary effects as a result of
 theoretical visibility of the Proposed Development from France but concludes that
 due to the distance, limited frequency of the specific visibility conditions where it
 would be visible from France and the negligible magnitude of change under those
 conditions, no significant effects are predicted. Transboundary effects have therefore
 been scoped out of the Seascape, Landscape and Visual Impact Assessment.
- Volume 2, Chapter 13 Offshore Archaeology and Cultural Heritage: The ES identifies the potential for transboundary effects on offshore archaeology and cultural heritage receptors. With regards to transboundary impacts as a result of changes to the hydrodynamic, sedimentary and erosion regimes, the ES concludes that no such impacts are expected. 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.

Onshore Chapters:

• No transboundary impact pathways were identified for any of the onshore environment aspect chapters in Volume 3 of the ES (Chapters 2-12 inclusive).

Secretary of State's comments

Under Regulation 32 of the 2017 EIA Regulations and on the basis of the current information available from the Applicant, there is no change to the previous conclusion, and the Inspectorate remains 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:

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

On a precautionary basis, notification letters will be re-sent to those States who did not respond to the previous Regulation 24 notification.

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

States to be notified:

- France, Belgium and Netherlands on the basis of potential impacts to marine mammals and commercial fisheries; and
- Germany and Denmark on the basis of potential impacts to commercial fisheries. .

Date: 15 August 2018

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/