



Transboundary screening undertaken by the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) for the purposes of Regulation 32 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 2017 EIA Regulations)	
Project name:	Proposed Morgan and Morecambe Offshore Windfarms Transmission Assets
Address/Location:	Located in the east Irish Sea, the transmission assets scoping boundary includes the Morgan Offshore Windfarm Generation Assets (EN010136) and the Morecambe Offshore Windfarm Generation Assets (EN010121). The onshore assets will be located in an area south of Blackpool, running east to Penwortham (see Figure 1.1 of the Scoping Report).
Planning Inspectorate Ref:	EN020028
Date(s) screening undertaken:	First screening – 20 September 2023

FIRST TRANSBOUNDARY SCREENING	
Document(s) used for transboundary Screening:	Environmental Impact Assessment – Scoping Report (‘the Scoping Report’) October 2022
Screening Criteria:	The Inspectorate’s Comments:
Characteristics of the Development	<p>The Scoping Report provides an indicative envelope for the Proposed Development, which it states will be subject to revision as the Environmental Statement (ES) develops and technical studies progress. The Proposed Development comprises the construction, operation and maintenance and decommissioning of the transmission assets required to enable the export of electricity from both the Morgan Offshore Wind Project (OWP) and the Morecambe Offshore Windfarm (OWF) via shared offshore and onshore export cable corridors to the National Grid connection point at Penwortham, Lancashire. The Proposed Development is likely to include the following key components:</p> <p>Offshore:</p> <ul style="list-style-type: none"> • Up to six offshore substation platforms (OSPs). • Up to five Interconnector cables between the OSPs • One offshore booster station for the Morgan Offshore Wind Project.

- Offshore export cable corridor containing up to four cables for the Morgan OWP and up to two cables for the Morecambe OWF.

The Scoping Report states that multiple foundation types remain under consideration for the OSPs and offshore booster station. These include monopiles, suction buckets, jackets with piling, jacket on suction buckets, tripods and gravity based structures.

Multiple methodologies remain under consideration for the installation of offshore export cables. Table 4.5 lists the burial techniques including trenching, jetting, ploughing, mechanical cutting and pre-lay ploughing. The Scoping Report refers to the potential for cable protection, comprising either rock armour or mattresses.

Onshore:

- Landfall site where the offshore export cables are jointed to the onshore export cables.
- Onshore export cable corridor: The area within which the onshore export cables (up to 18 cables) will be located between the landfall site and the onshore substations.
- Onshore substations for transforming the power supplied from the Morgan OWP and Morecambe OWF up to 400kV. These substations will be at a shared location, if practicable.
- 400kV cable corridor between the onshore substations and the existing National Grid substation at Penwortham.
- Joint bays and link boxes using concrete lined pits for providing clean and dry environment for jointing sections of cable.
- Crossings for cable to cross infrastructure and obstacles such as roads, railways and watercourses.
- Access routes and temporary haul roads including crossings using bridges or temporary culverts.
- Construction compounds (including any associated with Horizontal Directional Drilling) for storage of materials, plant and staff and space for temporary offices, welfare facilities, security and parking.

Duration

The Scoping Report sets out the construction elements and an installation period at section 4.5. The offshore export cables will be installed through the intertidal zone using either trenchless methods (eg Horizontal Directional Drilling (HDD)), where cables are pulled through pre-installed underground ducts) or open cut trenching (where cable circuits are buried using mechanical tools from ground level), or a combination of these methods.

Paragraph 4.5.2.2 states that the Transmission Assets are likely to be installed over a period of four years (Morgan

	<p>Offshore Wind Project) and up to three years (Morecambe Offshore Windfarm).</p> <p>Paragraph 4.6.1.1 states that the lifespan of the Transmission Assets is expected to be up to 35 years.</p> <p>Section 4.7 sets out the decommissioning process. It is expected that all structures above ground would be removed. The offshore and onshore cables and any offshore cable protection may be left <i>in-situ</i>, to minimise environmental impacts associated with their removal. The substations and any other onshore infrastructure would be decommissioned, disposing of waste materials as appropriate and where possible, recycled. The foundations being broken up and the site reinstated to its original condition or an alternative use.</p>
<p>Location of Development (including existing use) and Geographical area</p>	<p>The Proposed Development would extend from the linked Proposed Developments in the east Irish Sea:</p> <p>i) The Morgan Offshore Wind Project is located 22.3km from the Isle of Man and 36.3km from the northwest coast of England.</p> <p>ii) The Morecambe Offshore Windfarm is located in approximately 28.75km from the northwest coast of England. Both arrays are to be connected to the National Grid at Penwortham in Lancashire approximately 21km inland from the Ribble Estuary, 4km south west of Preston.</p> <p>Offshore</p> <p>The Scoping Report Marine Scoping Boundary area identifies a number of different users/receptors in the vicinity of the Proposed Development. These include:</p> <ul style="list-style-type: none"> • commercial shipping; • fishing vessels and fishing activities; • recreational vessels; aggregates and disposal sites; • oil and gas activities; • offshore wind farms; • designated and protected sites; • ecological receptors; and • marine archaeology and cultural heritage receptors. <p>The extent of the offshore/marine element of the Proposed Development is presented in Figure 1.1 of the Scoping Report.</p> <p>Onshore</p> <p>Land use within the onshore Scoping Boundary is predominantly agricultural.</p> <p>The onshore extent of the Proposed Development is presented in Figure 1.1 of the Scoping Report.</p> <p>Table 1.1 of Annex A of Part 3 of the Scoping Report states that the distance of the offshore Transmission Assets from the jurisdictional boundary of the nearest EEA state (Ireland) is</p>

	<p>77.3 km. No other information is provided in the Scoping Report about the exact location of any areas which could be affected which are under the jurisdiction of an EEA State.</p>
<p>Environmental Importance</p>	<p>Offshore</p> <p>Annex A of the Scoping Report identifies transboundary impacts for the following environmental aspects are unlikely to arise and can be screened out:</p> <ul style="list-style-type: none"> • physical processes; • benthic, subtidal and intertidal ecology; • marine archaeology; • other sea users; • seascape, landscape and visual resources; • socio-economics and community; • aviation and radar; and • effects on onshore receptors. <p>Potential for transboundary impacts has been identified for the following environmental aspects:</p> <ul style="list-style-type: none"> • fish and shellfish ecology; • marine mammals • offshore ornithology; • commercial fisheries; • shipping and navigation; and • climate change. <p>These are expanded on below.</p> <p>Fish and shellfish ecology</p> <p>The Scoping Report states that there are a number of species present in the study area, including European plaice, dab, solenette, Dover sole, whiting, lesser spotted dogfish, European seabass, thornback ray, cod, grey gunard, dragonet, cuckoo ray, spotted ray and basking shark.</p> <p>Diadromus species present in the study area include sea trout, European eel, river and sea lamprey, Atlantic salmon and European smelt.</p> <p>Shellfish species present in the study area include both king and queen scallops, common whelk, edible crab, common lobster, brown shrimp, horse mussel, swimming crab, transparent razor shell and prickly cockle.</p> <p>Species with potential spawning and nursery grounds within or overlapping with the study areas include anglerfish, cod, European hake, haddock, herring, horse mackerel, lemon sole, ling, mackerel, swimming crab, plaice, sandeels, sole, spotted ray, sprat, spurdog, thornback ray, tope shark and whiting. See figures 4.6-4.16 of the Scoping Report for species spawning area maps.</p> <p>Marine mammals</p>

The Scoping Report identifies the following species of marine mammals are likely to be present within the study area Harbour porpoise, minke whale, white beaked dolphin, bottlenose dolphin, short beaked common dolphin, Risso's dolphin, grey seal and harbour seal (see figure 4.17 of the Scoping Report).

The Scoping Report identifies that the nearest marine Special Area of Conservation (SAC) designated for marine mammals is the North Anglesey Marine / Gogledd Môn SAC, located c. 26 km from the scoping boundary. A total of ten other SACs are referenced, ranging from 60.6 km to 216.1 km from the scoping boundary.

Offshore ornithology

Offshore / intertidal – The Scoping Report identified through desk-top and boat surveys that there is potential for seabirds and migratory birds to be present within the study area in the Irish Sea with a range of potential impacts. Species likely to present include –Manx shearwater, northern gannet, herring gull, kittiwake, great cormorant, northern fulmar, European shag, Arctic skua, great skua, black headed gull, common gull, pomarine skua, long-tailed skua, common tern, Arctic tern, common guillemot, razorbill and Atlantic puffin. Further details will be submitted as part of the ES.

The Scoping Report identifies that the scoping boundary and study area partially overlaps with the Liverpool Bay / Bae Lerpwl marine Special Protection Area (SPA).

Commercial fisheries

The Scoping Report identifies numerous commercial fishing operations in the study area (see figure 5.1). The vessels involved may come from the UK, and Isle of Man as well as those from the Republic of Ireland and Belgium. The highest weight (tonnes) landed from 2010 – 2020 include the following species – queen scallop, king scallop, herring, whelk, edible crab, swimming crab, lobster and razor clam. Data show the scallops are important for commercial fisheries in the study area.

Shipping and navigation

Large commercial vessel routes are to the Port of Liverpool and one route passes Anglesey, to the south of the scoping boundary and others to or around the Isle of Man.

Passenger cruise and ferry vessels pass through the scoping boundary transiting to and from Liverpool to Belfast, Liverpool to Douglas, Heysham to Dublin, Heysham to Douglas and Heysham to Warrenpoint.

	<p>Recreational vessel activity in the study area occurs at low to medium activity in inshore areas (Figure 5.11).</p> <p>Tugs and service vessels operate in the study area supporting ongoing operations with the east Irish sea.</p> <p>Search and rescue craft also operate in the study area.</p> <p>The Scoping Report identifies the following other marine users and infrastructure features within the study area (including the east Irish Sea) which may also impact on shipping and navigation: International Maritime Organisation (IMO) Traffic Separation Scheme (TSS), oil and gas activities, commercial fishing, recreational cruising, commercial ship anchorages, pilot boarding stations, ports and marine terminals offshore windfarms and marine aggregates and disposal sites (Figure 5.9).</p> <p>Onshore</p> <p>The Ribble and Alt Estuaries SPA and Ramsar site are located within the Scoping Boundary. There are several other designated sites in the vicinity of the Proposed Development, including Lytham St Annes Dunes Site of Special Scientific Interest (SSSI) and the Sefton Coast SSSI. On the basis of available evidence the Inspectorate considers it is unlikely there would be an significant effect on the environment of an EEA state, and will re-consider this position at the application stage in light of more information.</p>
<p>Potential impacts and Carrier</p>	<p>Offshore</p> <p>Fish and shellfish</p> <ul style="list-style-type: none"> • Underwater noise from piling operations. • Loss of fish and shellfish habitat / disturbance to habitat due to increase in suspended sediments from installation of cables and foundations. <p>Marine mammals</p> <ul style="list-style-type: none"> • Underwater noise from construction and decommissioning operations, piling operations and vessel activities. • Noise associated with any pre-construction clearance of unexploded ordnance (UXO). • Indirect effects from changes in prey availability from habitat loss, underwater noise, increased sediment deposition. <p>Offshore Ornithology</p> <ul style="list-style-type: none"> • Temporary habitat loss during construction, operation and maintenance. • Disturbance and displacement from airborne noise, underwater noise and presence of vessels and infrastructure.

	<ul style="list-style-type: none"> • Indirect impacts from underwater noise affecting prey species. <p>Commercial fisheries</p> <ul style="list-style-type: none"> • Loss or restricted access to fishing grounds affecting fleets from the Republic of Ireland and Belgium. • Displacement of fishing activity into other areas affecting fleets from the Republic of Ireland and Belgium. <p>Shipping and navigation</p> <ul style="list-style-type: none"> • Impact on shipping routes transiting to/from Ireland as a result of presence of offshore infrastructure. <p>Climate Change</p> <ul style="list-style-type: none"> • The impact of GHG emissions arising from the manufacturing and installation of the Transmission Assets. • The impact of GHG emissions arising from the consumption of materials and activities required to facilitate the operation and maintenance phase. • The impact of GHG emissions arising from land use change during the construction, operation and maintenance and decommissioning phase. • The impact of GHG emissions arising from decommissioning works (eg plant, fuel and vessel use) and the recovery (or disposal) of materials. • The impact of climate change on the Transmission Assets. <p>The Scoping Report does not identify any impacts which would be likely to significantly affect the environment in an EEA state in relation to marine physical processes, aviation and radar, marine archaeology, benthic subtidal and intertidal ecology, and 'other marine users'.</p> <p>Onshore</p> <p>No potential effect pathways are identified in the Scoping Report.</p>
<p>Extent</p>	<p>Fish and shellfish</p> <p>Effects are likely to migratory fish species listed as features of European sites in other states or species of commercial importance to fishing fleets. Indirect impacts to fish spawning and nursery habitats may affect a wide area in the Irish Sea - See figures 4.6-4.16 of the Scoping Report for species spawning area maps. The extent of impacts has not been determined at this stage and will be subject to assessment in the Environmental Statement.</p>

	<p>Marine mammals</p> <p>The extent of impacts has not been determined at this stage and will be subject to assessment in the Environmental Statement.</p> <p>Offshore ornithology</p> <p>The effects on bird species that are within foraging range of the Transmission Assets are likely to be of variable spatial extent depending on the species. The extent of impacts has not been determined at this stage and will be subject to assessment in the Environmental Statement.</p> <p>Commercial fisheries</p> <p>The exact extent of impacts to fishing fleets cannot be determined at this stage and will be subject to assessment as part of the ES. However, due to the mobile nature of both commercial fish species and fishing fleets, there is the potential for impacts upon commercial fisheries to arise from the loss or restricted access to fishing grounds affecting fleets from the Republic of Ireland and Belgium and displacement of fishing activity into other areas affecting fleets from the Republic of Ireland and Belgium.</p> <p>Shipping and navigation</p> <p>There is potential for transboundary impacts upon shipping routes which transit to/from other states, including Ireland. However, the Scoping Report states that the extent of the impact will be subject to assessment during the EIA process.</p> <p>Climate Change</p> <p>It is noted within the Scoping Report that over the lifetime of the Transmission Assets, when considered cumulatively with the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm, potential transboundary impacts and resulting effects will be beneficial.</p>
<p>Magnitude</p>	<p>The magnitude of potential impacts has not been identified at this stage and will be assessed further by the Applicant during the EIA process.</p>
<p>Probability</p>	<p>Fish and shellfish</p> <p>The Scoping Report indicates that the likelihood of impact is potentially high.</p> <p>Marine mammals</p>

	<p>The Scoping Report indicates that the likelihood of impact is potentially high.</p> <p>Offshore ornithology</p> <p>The Scoping Report indicates that during the operation and maintenance phase it is likely that impacts will occur.</p> <p>Commercial fisheries</p> <p>The impacts will potentially occur during the operation and maintenance phase, with greater probability for impacts during the construction phase.</p> <p>Shipping and navigation</p> <p>The Scoping Report indicates the probability that impacts will occur during the operation and maintenance phase is high.</p> <p>Climate Change</p> <p>A specific likelihood of impacts is not given within the Scoping Report, as it is noted that all development processes which emit greenhouse gases (GHGs) have the potential to impact the atmospheric mass of GHGs as a receptor.</p>
<p>Duration</p>	<p>Fish and shellfish</p> <p>The majority of impacts during construction are considered likely to be short term and temporary. The potential effect from the operation and maintenance phases are likely to be longer term as the effects relate to long term habitat loss.</p> <p>Marine mammals</p> <p>The majority of impacts during construction are considered likely to be short term and temporary.</p> <p>Offshore ornithology</p> <p>The Scoping Report states that during the construction phase the majority of impacts are likely to be short-term and temporary. However, impacts during the operation and maintenance phase (presence of OSPs and the Morgan offshore booster station) are likely to be long term.</p> <p>Commercial fisheries</p> <p>Impacts are likely to be long-term (although most fishing activities may be able to resume following construction, dependant on final design of the infrastructure).</p>

	<p>Shipping and navigation</p> <p>Impacts are likely to be long- term due to the presence of the OSPs and offshore booster station.</p> <p>Climate Change</p> <p>A specific duration of potential climate change impacts is not given within the Scoping Report; however this screening considers that climate impacts may be long term during the construction, operation and decommissioning phases.</p>
<p>Frequency</p>	<p>Fish and shellfish, marine mammals and, commercial fisheries</p> <p>The frequency of effects is not considered specifically in the Scoping Report but is likely to be intermittent during construction and maintenance, with some effects considered to be continuous during operation.</p> <p>Offshore ornithology</p> <p>Impacts during the operation and maintenance phase (presence of OSPs and the Morgan offshore booster station) are likely to be continuous and of varying spatial extent depending on the bird species.</p> <p>Shipping and Navigation– The effects associated with the presence of infrastructure on shipping and navigation will progressively increase as the construction phase progresses.</p>
<p>Reversibility</p>	<p>The Scoping Report states the following:</p> <p>Fish and shellfish</p> <p>The effects may be reversible depending on the decommissioning strategy.</p> <p>Marine mammals</p> <p>The reversibility of effects is not considered specifically in the Scoping Report but may be possible in the longer-term dependant on the decommissioning strategy.</p> <p>Offshore ornithology</p> <p>The effects are likely to be reversible following decommissioning of the offshore infrastructure.</p> <p>Commercial fisheries</p>

	<p>Most fishing activities may be able to resume following construction, depending on the final design of the infrastructure. Any effects would be reversible after decommissioning.</p> <p>Shipping and navigation</p> <p>It is likely that impacts would be reversible after decommissioning, as it is anticipated that all structures above the seabed will be completely removed.</p> <p>Climate Change</p> <p>A specific duration of potential climate change impacts is not given within the Scoping Report; however this screening considers that climate impacts may be permanent and irreversible.</p>
<p>Cumulative impacts</p>	<p>The Applicant's cumulative effect assessment (CEA) has not yet been undertaken and the Applicant has not identified any likely significant cumulative effects at this stage.</p> <p>The Scoping Report does not identify other developments which may result in cumulative effects with the Proposed Development; these will be identified in the ES.</p>

Transboundary screening undertaken by the Inspectorate on behalf of the SoS

Under Regulation 32 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 2017 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 an 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:

Republic of Ireland – Commercial fisheries, fish and shellfish, marine mammals and shipping and navigation.

Belgium - Commercial fisheries and fish and shellfish.

Date: 20 September 2023

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/>