



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:	Lionlink Multi-Purpose Interconnector
Address/Location:	The Proposed Development is a proposed electricity link between the UK and the Netherlands. The onshore components would be located between the proposed Friston substation in Suffolk, in the east of England, and a landfall location at either Southwold or Walberswick. The offshore component is defined as the subsea cable corridor from mean high water springs (MHWS) mark at Southwold or Walberswick routing across the Southern North Sea to the UK and the Netherlands Exclusive Economic Zone (EEZ) boundary.
Planning Inspectorate Ref:	EN020033
Date(s) screening undertaken:	First screening – 25 September 2024 following the Applicant’s request for a scoping opinion

FIRST TRANSBOUNDARY SCREENING	
Document(s) used for transboundary Screening:	Lionlink Environmental Impact Assessment Scoping Report ('the Scoping Report') March 2024
Screening Criteria:	The Inspectorate’s Comments:
Characteristics of the Development	<p>The Proposed Development is an electricity link between the UK and the Netherlands that would supply up to 1.8 gigawatts (GW) of electricity. It comprises the onshore and offshore components located in the UK. It would have the following key components:</p> <p>Offshore</p> <ul style="list-style-type: none"> • Two high voltage direct current (HVDC) submarine cables. • One dedicated metallic return (DMR) cable. • Up to two fibre optic cables. • Route preparation works, including clearance of obstructions such as boulders, out of service subsea assets, smaller debris (eg fishnets and wires) and sandwaves. • External cable protection, eg rock berm or concrete mattresses, may also be required in some locations for third party asset crossings and/ or where full cable burial could not be achieved.

	<p>Onshore</p> <ul style="list-style-type: none"> • A proposed substation at Friston, which is a potential connection point to the national electricity transmission system (NETS) for up to five projects. The Scoping Report identifies different delivery scenarios for the substation. It could be constructed as part of the Proposed Development or the Proposed Development could seek amendments to the substation if it is constructed by a different project. • A new converter station to the east of Saxmundham. • A high voltage alternate current (HVAC) underground cable of 400 kilovolts (kV) between the Friston substation and the converter station. • A HVDC underground cable of 525kV connecting the proposed converter station to the landfall site. • A landfall area where the HVDC underground cable transitions between the marine and terrestrial environment in Suffolk through transition joint bays (TJB). Southwold and Walberswick are being considered as landfall locations. • Trenchless methods, such as horizontal directional drilling (HDD) installation, would be used where the cable crosses obstacles or environmentally sensitive areas, including at the selected landfall location. <p>The Scoping Report states that final design parameters for the HVAC and HVDC underground cable would depend on whether the Proposed Development co-locates with the proposed Sea Link (HVAC cable only) and Nautilus projects.</p> <p>Duration</p> <p>Onshore construction is anticipated to begin in 2026 and be completed in 2030. The life expectancy of the submarine cables is stated to be 40 years. The onshore component lifespan is also stated to be approximately 40 years.</p>
<p>Location of Development (including existing use) and Geographical area</p>	<p>All onshore elements of the Proposed Development would be in Suffolk, in the east of England. The offshore scheme would extend from the mean high water springs (MHWS) mark at the landfall location in Suffolk, UK to the UK/ Netherlands EEZ boundary. Figure 1-1 of the Scoping Report (Volume 2) presents the 'scoping boundary' for the Proposed Development.</p> <p>The onshore scheme would be located in a predominantly rural area. Existing settlements, such as Friston, Saxmundham, Southwold and Walberswick, are located near to proposed components. Existing infrastructure in the onshore scoping boundary includes overhead electricity lines, a railway line, the A12 road and the Sizewell nuclear site. The Scoping Report states that the proposed Friston substation is the NETS connection point for five projects, including the Proposed Development, East Anglia One North (EA1N) and East Anglia Two (EA2) offshore wind farms (OWF), and Sea Link and Nautilus electricity line. Land use at the two potential landfall locations is stated to be agricultural fields.</p>

	<p>Two potential routing corridors for the offshore cables are identified, shown as B and C on Figure 1-4 (Scoping Report, Volume 2). Route B would cross existing telecommunication cables and the Lightbuoy Deep Water Channel before travelling north around the east side of the proposed Norfolk Vanguard West OWF and then crossing the West Friesland Deep Channel and running north of the proposed Norfolk Boreas OWF. Route C would run along the northern boundary of the proposed EA1N OWF and along the boundary of the proposed Norfolk Vanguard East OWF parallel to the NeuConnect interconnector (under construction) and the West Friesland Deep Water Channel. Figure 3-3 (Scoping Report, Volume 2) shows the location of existing and proposed OWF and export cable corridors in UK and Dutch waters relative to the Proposed Development study area. The Scoping Report states that the Proposed Development would ultimately connect into a Dutch OWF, selected by TenneT (Dutch transmission system owner).</p> <p>Distance to European Economic Area (EEA) States</p> <p>The Proposed Development is part of a wider linear infrastructure project located between the UK and the Netherlands, an EEA State. The Netherlands EEZ boundary is located immediately adjacent to the Proposed Development.</p>
<p>Environmental Importance</p>	<p>Onshore</p> <p>The onshore scoping boundary of the Proposed Development includes parts of the Heath National Landscape (formerly Area of Outstanding Natural Beauty (AONB)), Minsmere-Walberswick Heaths and Marshes Sites of Special Scientific Interest (SSSI), Minsmere to Walberswick Heaths and Marshes Special Area of Conservation (SAC) and Minsmere-Walberswick Special Protection Area (SPA) and Ramsar site. Four areas of Ancient Woodland are located within the onshore scoping boundary. Benacre to Easton Bavents SPA is located immediately to the north of the onshore scoping boundary, with Benacre to Easton Bavents Lagoons SAC also circa 200m north. The Outer Thames Estuary SPA is located immediately to the east of the onshore scoping boundary.</p> <p>The Scoping Report does not identify any potential receptors of environmental importance in the onshore environment that could result in transboundary impacts. Onshore receptors and impacts are therefore not discussed further in this screening.</p> <p>Offshore</p> <p><u>Marine physical environment</u></p> <p>The Scoping Report states that the Proposed Development crosses through the Water Framework Directive (WFD) Suffolk water body and that there are designated bathing waters at Lowestoft and Southwold. Paragraph 18.3.43 states that designated sites with marine habitat features of relevance to physical processes include the Southern North Sea SAC, Haisborough, Hammond and Winterton Marine Protection Area</p>

(MPA) and North Norfolk Sandbanks and Saturn Reef SAC. Several coastal SSSIs are also identified as being present including Pakefield to Easton Bavents, Minsmere-Walberswick Heaths and Marshes and Leiston-Aldeburgh. It states that the designated sites potentially affected may be refined following selection of the final route for the subsea cable.

Intertidal and subtidal benthic ecology

The Scoping Report states that the Proposed Development does not intersect any designated sites; however several sites designated for benthic features or habitats/ species dependent on those features are identified within the wider study area. Table 19-3 describes the offshore sites, including North Norfolk Sandbanks and Saturn Reef SAC and Haisborough, Hammond and Winterton SAC. Table 19-4 identifies onshore (intertidal) sites including Minsemere-Walberswick Heaths and Marshes SAC, Minsmere-Walberswick Ramsar site, Benacre to Easton Bavents Lagoons SAC, Pakefield to Easton Bavents SSSI and Minsmere-Walberswick Heaths and Marshes SSSI.

Paragraph 19.3.31 identifies Annex I habitats present within the study area, including:

- sandbanks which are slightly covered by seawater all the time;
- reefs;
- annual vegetation of drift lines; and
- coastal lagoons.

Fish and shellfish

The Scoping Report states that Benacre to Easton Bavents Lagoons SAC is located 1.5km from the proposed Southwold landfall and 4.9km from the proposed Walberswick landfall. Whilst not designated for Annex II fish or shellfish species, it is stated that nationally rare or scarce species (lagoonal sand shrimp) are present in the lagoons.

Two European sites designated for Annex II migratory fish features are present within the 100km radius used by the Applicant as an initial screening distance for protected sites with migratory fish. These are:

- Vlammse Banken SAC (Belgium) – designated for twaite shad, and river and sea lamprey; and
- Essex Estuaries SAC – designated for allis and twaite shad.

Table 20-7 of the Scoping Report lists protected species observed within the offshore scoping study area, including:

- pelagic species – mackerel, herring, European pilchard and horse mackerel;
- demersal species – Atlantic cod, whiting, ling, plaice, sole and Atlantic halibut;
- elasmobranch species – basking shark, tope, blonde ray, cuckoo ray, spotted ray, undulate ray, smooth-hound, starry smooth-hound and big-eye thresher; and
- commercial shellfish species - crawfish.

Table 20-6 identifies that several of these species also use the study area for spawning and nursery grounds.

Paragraph 20.3.48 states that twaite and allis shad, and European eel are known to have spawning migrations between April and May but are rarely observed in the study area. Sea and river lamprey, and Atlantic salmon have also been sighted but on rare occasions.

Intertidal and offshore ornithology

The offshore components of the Proposed Development cross the Outer Thames Estuary SPA, which is designated for marine bird features including red-throated diver, common and little tern. Table 21-5 of the Scoping Report also identifies several onshore European sites within the study area with marine bird qualifying features. These include Minsmere-Walberswick SPA, Minsmere-Walberswick Ramsar site, Benacre to Easton Bavents SPA, Broadland SPA and Ramsar site, Pakefield to Easton Bavents SSSI, Sizewell Marshes SSSI and Leighton-Aldeburgh SSSI.

Marine mammals and reptiles

The marine mammals and reptiles that could be present in the study area are outlined in Section 22.3 of the Scoping Report. The following were identified in Table 22-3 as occurring commonly or occasionally in the study area:

- harbour porpoise;
- short-beaked common dolphin;
- white-beaked dolphin;
- bottlenose dolphin;
- grey seal; and
- harbour seal.

The offshore components of the Proposed Development would be located within the Southern North Sea SAC, designated for harbour porpoise. Two SACs within EEA waters are located within 100km of the Proposed Development and designated for marine mammals: Vlaamse Banken SAC (Belgium) and Klaverbank SAC (the Netherlands), both designated for grey and harbour seal, and harbour porpoise.

Shipping and navigation

Section 23.3 of the Scoping Report confirms that commercial vessels (such as cargo vessels and tankers), fishing vessels and recreational vessels use or move through the study area.

Commercial fisheries

Table 24-5 of the Scoping Report describes the annual UK catch value from the International Council for the Exploration of the Sea (ICES) rectangles 33F1, 33F2, 33F3, 34F2, 34F3, 35F2 and 35F3 in the period 2018 to 2022. Vessels from France, Germany and the Netherlands also landed catches in these ICES rectangles, as shown in Table 24-7 and Insert 24-3. Paragraph 24.3.8 states that Belgium and France have historic fishing rights within the study area, which will remain

	<p>until at least 2025. Paragraph 24.3.11 states that vessels from Denmark have also been observed in the study area.</p> <p><u>Other marine users</u></p> <p>The Scoping Report identifies other marine users around the Proposed Development including:</p> <ul style="list-style-type: none"> • several OWF at various stages of development, including planned OWF in the Netherlands; • subsea power and telecommunications cables at various stages of development; • disposal sites; • oil and gas pipelines and offshore surface structures; and • recreational activities. <p><u>Marine archaeology</u></p> <p>Section 26.3 of the Scoping Report describes potential marine archaeology resource within the study area. There is potential for the presence of paleogeographic material dating from the Palaeolithic onwards, as well as maritime craft from the Mesolithic to modern period and 20th century aircraft particularly in relation to the Second World War.</p>
<p>Potential impacts and Carrier</p>	<p>Potential transboundary impacts considered in offshore aspects of the Scoping Report are listed below. For most receptors considered, it specifies that any potential impact would be close to the EEZ boundary, ie it could affect the Netherlands. It also states that potential impacts would be considered in the EIA for the Netherlands' project. Table 29-4 of the Scoping Report summarises the conclusions reached for some of the individual offshore sections. Paragraph 29.3.8 states that impacts could occur to the Netherlands and other nations' jurisdictions, without specifying any other EEA states.</p> <p>Offshore</p> <p><u>Marine physical environment</u></p> <ul style="list-style-type: none"> • Temporary increase in suspended sediment and deposition. <p>The Scoping Report states that likely significant transboundary impacts would not occur due to the limited spatial extent of the impacts.</p> <p><u>Intertidal and subtidal benthic ecology</u></p> <ul style="list-style-type: none"> • temporary increase in suspended sediment and deposition; • water quality changes; • underwater noise changes; and • introduction or spread of invasive non-native species (INNS). <p>The Scoping Report states that significant transboundary impacts would not be likely to occur due to the limited spatial extent of the impacts and based on implementation of control measures for INNS.</p> <p><u>Fish and shellfish</u></p> <ul style="list-style-type: none"> • Temporary increase in suspended sediment and deposition;

- water quality changes (from accidental spills);
- underwater noise changes; and
- introduction or spread of INNS.

The Scoping Report states that likely significant transboundary impacts would not occur due to the limited spatial extent of the impacts (and short-term nature of underwater noise change) and based on implementation of control measures for accidental spills and INNS.

The Inspectorate does not consider that the Applicant's justification is sufficient to exclude potential for transboundary impacts from temporary increase in suspended sediment and underwater noise to fish and shellfish.

Intertidal and offshore ornithology

- visual/ physical disturbance.
- changes in prey availability; and
- accidental spills.

Scoping Report, Table 21-6 does not address transboundary impacts as a separate pathway but proposes to assess potential likely significant effects from visual/ physical disturbance (to all bird species identified aside from terns, gulls, kittiwakes and gannets) and changes in prey availability (all bird species identified). Table 29-4 does not record any likely significant transboundary impacts to ornithology.

Marine mammals and reptiles

- underwater noise change from presence of vessels and equipment;
- changes in prey availability; and
- accidental spills.

The Scoping Report states that there is potential for likely significant transboundary impacts from changes in prey availability to cetaceans and pinnipeds. The other impact pathways are proposed to be scoped out of assessment for transboundary impacts based on limited spatial extent, limited duration of underwater noise and implementation of control measures (accidental spills).

Shipping and navigation

Paragraph 23.4.2 of the Scoping Report states that there is no potential for transboundary impacts as the baseline assessment includes all international vessels likely to be impacted.

The following potential effects are identified in Table 23.2 of the Scoping Report:

- collision risk;
- disruption during cable installation to vessel routing/ timetables, fishing and recreational activities, and third party marine activities (eg dredging);
- vessels dragging anchor over the cable, including in an emergency;

	<ul style="list-style-type: none"> • fishing vessels snagging gear on the cable; • reduction in under-keel clearance from laid cable and associated protection; and • interference with marine navigational equipment. <p>The Inspectorate does not consider that the Applicant’s justification is sufficient to exclude the potential for transboundary impacts to commercial fisheries although no EEA states are identified in this section of the Scoping Report.</p> <p><u>Commercial fisheries</u></p> <p>Paragraph 24.4.2 of the Scoping Report states that there is no potential for transboundary impacts given that the baseline assessment includes all international vessels likely to be impacted and that potential for cumulative impacts will be addressed in the cumulative effects assessment in the ES.</p> <p>The following potential effects are identified in Table 24-8 of the Scoping Report:</p> <ul style="list-style-type: none"> • temporary restricted access to fishing ground; • temporary displacement of fishing activity into other areas; • changes in distribution of target species; and • temporary increase and deposition of suspended sediment. <p>The Inspectorate does not consider that the Applicant’s justification is sufficient to exclude the potential for transboundary impacts to commercial fisheries.</p> <p><u>Other marine users</u></p> <p>Scoping Report, Table 25-6 does not address transboundary impacts as a separate pathway but proposes to assess potential likely significant effects to other marine users from disruption caused by the presence of cable and cable protection. Table 29-4 does not record any likely significant transboundary impacts to other marine users.</p> <p>The Inspectorate does not consider that the Applicant’s justification is sufficient to exclude the potential for transboundary impacts to other marine users.</p> <p><u>Marine archaeology</u></p> <p>Table 26-2 of the Scoping Report identifies potential for transboundary impacts from direct and indirect effects to seabed and sub-seabed heritage receptors, including from change to sedimentary regimes.</p>
<p>Extent</p>	<p>The extent of potential transboundary impacts to the receptors that the Applicant proposes to assess (marine mammals and marine archaeology) has not been determined at this stage and would be subject to assessment in the Environmental Statement (ES). The Scoping Report indicates that impacts would be limited in spatial extent in proximity to the EEZ boundary. For effects associated with change in water quality (from accidental spills), the Scoping Report indicates that these are likely to be limited due to the small volumes of pollutants involved. For marine mammals, Table 22-5 states</p>

	that habitat loss would be localised. As noted above, the Inspectorate does not consider that sufficient justification has been presented to exclude the possibility of significant transboundary effects to shipping and navigation but based on the information provided is not able to ascribe this effect to a particular EEA state at this time.
Magnitude	The magnitude of potential transboundary impacts has not been evaluated in detail at this stage and will be subject to further assessment. The Scoping Report has identified potential for transboundary effects on marine mammals and marine archaeology. The Inspectorate considers that sufficient justification was not provided in the Scoping Report to exclude the potential for significant transboundary effects to fish and shellfish, shipping and navigation, commercial fisheries and other marine users.
Probability	The probability of potential transboundary impacts occurring has not been evaluated at this stage. For marine mammals, the Scoping Report states that impacts to prey species are unlikely to be significant but this cannot be confirmed until the EIA is complete. The Inspectorate considers that, given the information in the Scoping Report, impacts on fish and shellfish, marine mammals, shipping and navigation, commercial fisheries, other marine users and marine archaeology are most likely to result in significant effects.
Duration	Limited information is currently available on the duration of potential transboundary impacts. For effects to shipping and navigation from vessels interacting with the proposed subsea cables (eg from anchor drag or snagged gear), the Scoping Report states that these would be short-term.
Frequency	The frequency of potential transboundary impacts has not been evaluated at this stage.
Reversibility	The reversibility of potential transboundary impacts has not been evaluated at this stage. For effects associated with an increase in suspended sediments, it is stated that these are expected to be temporary. For marine mammals, the Scoping Report states that impacts to prey species (from habitat loss) would be temporary. Effects to commercial fisheries from restricted access to fishing grounds or displacement of fishing activity are also described as temporary.
Cumulative impacts	The Applicant's cumulative impact assessment has not yet been undertaken and the Applicant has not identified any likely significant cumulative effects at this stage.

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:

The Netherlands – due to potential impacts to marine mammals, commercial fisheries, other marine users and marine archaeology.

Belgium – due to potential impacts to fish and shellfish, commercial fisheries and marine mammals.

France and Germany – due to potential impacts on commercial fisheries.

Date: 25 September 2024

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 Annex 1 to Nationally Significant Infrastructure Projects: Advice on Transboundary Impacts and Process, available at:

<https://www.gov.uk/government/collections/national-infrastructure-planning-advice-notes>