OSSIAN OFFSHORE WIND FARM: TRANSMISSION INFRASTRUCTURE

EIA SCOPING REPORT: PART 1 (OF 5)

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Ossian Transmission Infrastructure
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Approval for Issue		
For and on behalf of Ossian Offshore Wind Farm Limited	Paul Darnbrough	21 February 2025

Prepared by:	**RPS**
Prepared for:	**Ossian Offshore Wind Farm Limited**
Checked by:	Kate Elliott/Ed Maxwell
Accepted by:	Campbell Purves/Steph Smith-Clarke
Approved by:	Paul Darnbrough

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GLOSSARY

Term	Meaning
Aarhus Convention	The Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters
Abnormal Indivisible Load	Load or vehicles that exceed maximum vehicle weight, axle weight or dimensions as set out in the Road Vehicles (Construction and Use) Regulations 1986 as amended and Road Vehicles (Authorised Weight) Regulations 1998.
Access land	The Countryside and Rights of Way Act 2000 gives a public right of access to land mapped as 'open country' (mountain, moor, heath, down and coastal margin) or registered common land. These areas are known as ‘access land'.
Agricultural Land Classification	Agricultural Land Classification (ALC) is a system used in England and Wales to grade the quality of land for agricultural use. The land is classified into five grades, with 1 being the best and 5 being the worst. The classification is based on the extent of limitations on agricultural use for food production, including climate, gradient, soil depth, wetness, droughtiness, and stoniness.
Air Quality Management Area	An area declared by a local authority where its review and assessment of air quality shows that an air quality objective is likely to be exceeded.
Algal Bloom	A rapid increase or aggregation in the algae population of freshwater or marine water systems. It is often defined by water discolouration of their pigments. Algal blooms occur when there is an overabundance of nutrients, primarily phosphorus, on which algae depend. Algal blooms can be harmful to the resident population, as well as humans, when they are composed of phytoplankton known to naturally produce bio-toxins.
Allision	Contact between a moving object and a stationary object.
Ambient Sound Level, $L_{Aeq,T}$	The steady sound level which, over a period of time T, contains the same amount of A-weighted sound energy as the time varying sound over the same period. Also known as the equivalent continuous sound pressure level.
Annual Exceedance Probability	The inverse of the return period, expressed as a percentage.
Applicant	Ossian Offshore Wind Farm Limited (see below).
Array	The wind turbines and associated foundations, moorings and anchors, Offshore Substation Platforms and inter-array/interconnector cables.
Array Application	The separate and already submitted applications for consent under Section 36 of the Electricity Act 1989 and for Marine Licences under the Marine and Coastal Access Act 2009, associated with the Array.
Array Site Boundary	Area within which the Array will be located (in the Scottish Offshore Region).
Automatic Identification System (AIS)	A system by which vessels automatically broadcast their identity, key statistics including location, destination, length, speed, and current status, (e.g. under power). Most commercial vessels and United Kingdom/European Union fishing vessels over 15 metres in length are required to carry AIS.
Background Sound Level, $L_{A90,T}$	The A-weighted sound pressure level that is exceeded by the residual sound at the assessment location for 90% of a given time interval, T, measured using fast time-weighting, F, and quoted to the nearest whole number of decibels.
Bathing Waters	Designated coastal or inland waters that are used by a large number of people for bathing.
Best and most versatile	According to the ALC system, best and most versatile land is defined as Grade 1 (excellent quality), Grade 2 (very good quality) or Grade 3a (good quality) agricultural land. This is the land which is most flexible, productive and efficient in response to inputs, and which can best deliver future crops for food and non-food uses such as biomass, fibres and pharmaceuticals.
Bronze Age	The time period 1,800 to 600 BC.
Carbon Capture and Storage (CCS)	The process involving capturing carbon dioxide from the emissions of industrial facilities and power plants, then transporting it to locations where it can be stored to prevent it from entering the atmosphere, thereby helping to reduce global warming.
Catadromous fish	Fish species that live in freshwater and migrate to sea to breed.
Cefas Action Level 1	A threshold used to determine the contaminant loading of dredged material and its suitability for disposal at sea. Material with contaminant levels below Action Level 1 is generally

Term	Meaning
	considered suitable for sea disposal, while levels above Action Level 2 are considered unsuitable.
Climate Change	A change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.
Collision	Contact between moving objects.
Conservation Area	An area designated by a local authority as being of special architectural or historic interest.
Construction Traffic Management Plan	A document detailing the construction traffic routes and management of heavy goods vehicles and personnel travel, protocols for delivery of Abnormal Indivisible Loads to site, measures for road cleaning and sustainable site travel measures.
Countryside and Rights of Way (CRoW) Act 2000 – Section 4 Conclusive Open Country	Land mapped as Conclusive Open Country under the Countryside and Rights of Way Act 2000.
Crustacean	Invertebrate animals that constitute one group of arthropods that are part of the subphylum Crustacea. This subphylum includes aquatic species such as prawns, crabs, lobsters, shrimp, krill, barnacles, and seed shrimp.
Decibel	A unit used to measure or compare the intensity of a sound by comparing it with a given reference level on a logarithmic scale.
Demersal fish	Demersal fish are species that live and feed on or near the seabed.
Development Consent Order (DCO)	An order made under the Planning Act 2008 (as amended) granting development consent.
Diadromous fish	Fish species that regularly migrate between sea marine and freshwater systems
Dust	Solid particles suspended in air or settled out onto a surface after having been suspended in air, as defined by the Institute of Air Quality Management.
Ecological Quality Ratio	The ratio between the value of the observed biological parameter for a given surface water body and the expected value under reference conditions.

Term	Meaning
EIA Regulations	The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and/or The Marine Works (Environmental Impact Assessment) Regulations 2007, as required by the context.
EIA Scoping Opinion	Comprises the reports presenting the written opinion of the Planning Inspectorate, and of the Scottish Ministers, as to the scope and level of detail of information to be provided in the Environmental Statement for a development, provided in response to the EIA Scoping Report.
EIA Scoping Report	The document (this document) presenting the proposed scope of the EIA, as prepared by the Applicant.
Elasmobranch	The term refers to cartilaginous fishes which include sharks, rays, and skates.
English Offshore Transmission Infrastructure (EOfTI)	The Offshore Export Cable(s) located in English offshore and inshore regions up to Landfall.
Environmental Impact Assessment (EIA)	Assessment of the likely significant effects of a plan, project or activity on the environment, in accordance with the EIA Regulations.
Environmental Statement (ES)	The document presenting the results of the Environmental Impact Assessment process.
Espoo Convention	The United Nations Economic Commission for Europe (UNECE) Convention on Environmental Impact Assessment in a Transboundary Context.
European Protected Species	Species (such as bats, GCN, otters and dormice) which receive full protection under The Conservation of Habitats and Species Regulations 2017 and Conservation of Offshore Marine Habitats and Species Regulations 2017.
European Sites	European sites comprise sites protected by the Habitats Regulations either by statute: Special Areas of Conservation (SACs), Site of Community Importance (SCIs) designated for habitats and species and Special Protection Areas (SPAs) designated for birds and their supporting habitats; or by government policy: Proposed SACs, Potential SPAs and Ramsar sites – Wetlands of international importance (both listed and proposed).

Term	Meaning
Farm holding	Land and buildings used for horticulture, livestock, grazing and various other uses, which are commercial in nature.
Feature	Prominent elements in the landscape, such as tree clumps, church towers or wooded skylines.
Formal Safety Assessment	A structured and systematic process for assessing the risks and costs (if applicable) associated with shipping activity.
Greenhouse Gas	A gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect. Examples include carbon dioxide (CO_2) and methane (CH_4).
Health and wellbeing	The World Health Organisation (WHO) define health in terms of states of wellbeing. Health is 'a *state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity*' (WHO, 1948). Mental health is '*a state of mental well-being that enables people to cope with the stresses of life, to realize their abilities, to learn well and work well, and to contribute to their communities'* (World Health Organization, 2022).
Heavy Goods Vehicle	A lorry with a gross weight exceeding 7.5 tonnes.
Heritage significance	The value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.
Historic Environment Record	Information service that provides access to resources relating to the archaeology and historic built environment of a defined geographic area.
Historic Landscape Classification	An aspect of more general landscape characterisation that seeks to provide an additional element of 'time-depth', allowing the historic evolution of the landscape to be perceived and understood.
HVAC Onshore Export Cable(s)	High voltage alternative current cable(s) used for transferring electricity from the Onshore Converter Station(s) to the National Grid Substation(s).
HVDC Onshore Export Cable(s)	High voltage direct current cable(s) used for transferring electricity from the Landfall to the Onshore Converter Station(s).
Hydromorphology	A term used to describe the physical character and water content of water bodies.

Term	Meaning
Important Ecological Feature	Those features that are important and should be subject to detailed assessment, as explained in the Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018).
Impulsivity	A measure of the sharpness of sudden nature of a sound which is short in duration such as a gunshot or a blast.
Intermittency	A measure of the 'on/off' nature of a sound source.
Internal Drainage Board	A public governmental body which manages water levels within a specific area (internal drainage district).
Intertidal Area	The area between Mean High Water Springs and Mean Low Water Springs.
Intertidal Scoping Boundary	The boundary used for the purposes of the EIA Scoping Report in which the Landfall will be located between Mean High Water Springs and Mean Low Water Springs.
Intertidal Zone	The area of seashore that is exposed at low tide and inundated at high tide.
Intravalvular fluid	Fluid found between valves; with reference to this document, the sampled fluid within a bivalve mollusc (e.g. cockle *Cerastoderma edule*) to assess the microbial standard within a Shellfish Water Protected Area.
Landfall	The area where the Offshore Export Cables are brought ashore and jointed to the Onshore Export Cables via the Transition Joint Bays. This term applies to the entire area between the Transition Joint Bays and Mean Low Water Springs and the infrastructure within this area.
Landfall Search Areas	Areas identified at the early stages of site selection, within which Landfall sites could be located. These areas were subject to environmental, technical and consenting constraints analysis.
Landscape	An area, as perceived by people, the character of which is a result of the action and interaction of natural and/or human factors.
Landscape Character Areas	These are single unique areas which are the discrete geographical areas of a particular landscape type.
Lead Local Flood Authority	A County Council or Unitary Authority with responsibility for managing local flood risk.

Term	Meaning
Lincolnshire Connection Substation A (LCS A) Onshore Converter Station	The Onshore Converter Station that will connect to the National Grid LCS A substation.
Lincolnshire Wildlife Trust Site	A non-statutory site identified and designated by Lincolnshire Wildlife Trust based on scientific criteria and detailed ecological surveys.
Listed building	A building or structure placed on a statutory 'List' of buildings of special architectural or historic interest. There are three grades of listing, which are: • grade I (these are of exceptional interest); • grade II* (these are particularly important); and • grade II (these are of special interest).
Local Geological Site	Local Geological Sites are the most important places for geology and geomorphology outside statutorily protected land such as Sites of Special Scientific Interest.
Local Highway Authority	A body responsible for the public highways in a particular area of England and Wales, as defined in the Highways Act 1980.
Local Nature Reserve	A designation for areas of land that are locally important for wildlife and designated by local authorities under the National Parks and Access to the Countryside Act 1949.
Local Wildlife Site	A non-statutory site identified and designated locally based on scientific criteria and detailed ecological surveys.
Long Distance Footpath	These are promoted public footpaths typically measuring 20 miles or more in length.
Magnetometer	A device that measures magnetic fields.
Marine Guidance Note (MGN)	A system of guidance notes issued by the Maritime and Coastguard Agency (MCA) which provide significant advice relating to the improvement of the safety of shipping at sea, and to prevent or reduce pollution from shipping.
Mean High Water Springs	The average height of the sea surface with respect to the land of all high tides that are considered spring tides (tides that occur when the moon's declination is 23.5°, its maximum).
Mean Low Water Springs	The lowest level reached by the sea at low tide during mean low water spring tide. This is defined as the average throughout the year, of two successive low waters, during a 24-hour period in each month when the range of the tide is at its greatest.

Term	Meaning
Medieval Period	The time period AD 1066 to 1485.
Mesolithic	A period of human prehistory usually defined in the UK as beginning at the end of the Pleistocene in 10,000 BC and ending in 4,000 BC.
National Cycle Route	These are routes listed on the National Cycle Network, which comprises a UK-wide network of signed paths and routes for walking, wheeling, cycling, and exploring outdoors.
National Grid Substation	An electrical substation operated as part of the National Grid for the transmission of high voltage electricity to which the Onshore Transmission Infrastructure will connect.
National Heritage List for England	List of nationally designated heritage assets maintained by Historic England.
Navigational Risk Assessment (NRA)	Document required by the MCA under MGN 654 which assesses risk associated with an Offshore Renewable Energy Installation to shipping and navigation users.
Neolithic Period	The time period 4,000 to 1,800 BC.
Non-statutory consultee	Organisations that an applicant may choose to consult in relation to a project who are not designated in law but are likely to have an interest in the project.
Non-motorised user amenity/fear and intimidation	Broadly defined as the relative pleasantness of a journey.
Non-motorised user delay	The delay incurred to a journey by non-motorised users.
Nursery grounds	An area where juveniles of a species regularly occur as a population.
Offshore Export Cable(s)	High voltage cable(s) used for exporting electricity from the Offshore Substation Platform(s) to the Landfall.
Offshore Export Cable Corridor(s)	Area within which the Offshore Export Cable(s) will be located within and between the Offshore Substation Platform(s) and Landfall.
Offshore Scoping Boundary	The boundary used for the purposes of this EIA Scoping Report in which the Scottish Offshore Transmission Infrastructure and the English Offshore Transmission Infrastructure will be located (up to Mean Low Water Springs).

Term	Meaning
Offshore Substation Platform (OSP)	Offshore substation platform used to convert and transfer the energy collected by the wind turbines to Landfall, consent for which has been sought separately, as part of the Array Application.
Offshore Transmission Infrastructure	Comprises the English Offshore Transmission Infrastructure and the Scottish Offshore Transmission Infrastructure
Onshore Converter Station	The onshore electricity transmission buildings encompassing a high voltage direct current (HVDC) converter substation comprising of converter buildings, HV internal and/or external equipment.
Onshore Converter Station Search Area	An area of search published at the scoping stage, which represents the area within further site selection work will be undertaken. The search areas represent a 5 km radius from each of the following substation areas proposed by NGET as part of the Grimsby to Walpole project: • LCS A Substation; and • Weston Marsh Substation.
Onshore Export Cable(s)	High voltage cable(s) used for transferring electricity from the Landfall to the National Grid Substation(s) via the Onshore Converter Station(s).
Onshore Export Cable Corridor	Area within which the Onshore Export Cable(s) will be located.
Onshore Scoping Boundary	All elements of the Ossian Transmission Infrastructure Scoping Boundary landward of Mean High Water Springs.
Onshore Transmission Infrastructure	Comprises the Onshore Export Cable(s) and Onshore Converter Station(s).
Ossian	All components of the offshore wind farm, including the Array, and the Ossian Transmission Infrastructure.
Ossian Offshore Wind Farm Limited (OWFL) (the Applicant)	Joint venture between SSE Renewables (SSER), Copenhagen Infrastructure Partners (CIP) and Marubeni Corporation (Marubeni).
Ossian Transmission Infrastructure	Comprises the Onshore Transmission Infrastructure, Landfall and the Offshore Transmission Infrastructure.
Ossian Transmission Infrastructure DCO Application	The DCO application for the English Offshore Transmission Infrastructure, Landfall and the Onshore Transmission Infrastructure.

Term	Meaning
Ossian Transmission Infrastructure Order Limits	The area within which all components of the English Offshore Transmission Infrastructure, Landfall and the Onshore Transmission Infrastructure will be located, including areas required on a temporary basis during construction and/or decommissioning.
Ossian Transmission Infrastructure Scoping Boundary	Comprising the areas of the Offshore Scoping Boundary, Onshore Scoping Boundary and Intertidal Scoping Boundary.
Palaeolithic	A period of human prehistory usually defined in the UK as dating between 900,000 BC to 10,000 BC.
Pelagic fish	Pelagic fish are species which live and feed within the water column.
Personal Injury Accident	An accident that results in personal injury occurring on the public highway (including footways) in which at least one road vehicle was involved.
Post-medieval Period	The time period AD 1486 to 1799.
Planning Inspectorate	The agency responsible for operating the planning process for applications for development consent under the Planning Act 2008.
Preferred Landfall Search Area	Following constraints analysis undertaken for the Initial Landfall Search Areas, this area represents a refined search area (based on Initial Landfall Search Area 3). The Preferred Landfall Search Area is the area within further site selection work will be undertaken and within which it is anticipated that all elements of the Landfall will be located.
Preliminary Environmental Information Report (PEIR)	The document presenting the preliminary findings of the Environmental Impact Assessment process. It is developed to support formal consultation and presents the preliminary findings of the assessment to allow an informed view to be developed of a proposed development, the assessment approach that has been undertaken, and the preliminary conclusions on the likely significant effects of a proposed development and environmental measures proposed.
Principal Aquifer	A strategically important aquifer unit, which is designated by the Environment Agency.
Prehistoric Period	The general term used for the time period before the Roman invasion of AD 43.

Term	Meaning
Priority Marine Features	Habitats and species considered to be of marine nature conservation priority.
Public Open Space	A collective term used for any land laid out as a public garden, or used for the purposes of public recreation, or land being a disused burial ground.
Public Rights of Way	A right by which the public can pass along linear routes over land at all times, including footpaths, bridleways, restricted byways, and byways.
Quality elements	The ecological status of surface water bodies as defined by biological, physiochemical and hydro morphological elements.
Ramsar sites	Wetlands of international importance that have been designated under the criteria of the Ramsar Convention. In combination with Special Protection Areas and Special Areas of Conservation, these sites contribute to the national site network.
Regional Sea 1	Contains the northern North Sea as outlined in Offshore Energy Strategic Environmental Assessment (OESEA) 4. This Regional Sea starts at northern Scotland and covers area down to Flamborough Head.
Regional Sea 2	Contains the southern North Sea as outlined in OESEA4. This Regional Sea starts at Flamborough Head and covers area down to the Kent coastline.
Registered Park and Garden	A park and/or garden of special historic interest placed on a non-statutory Register. There are three grades of registration: • grade I – these are of exceptional interest; • grade II* - these are particularly important; and grade II – these are of special interest.
Residual sound level, Lr = LAeq,T	The ambient sound level at a receptor in the absence of influence from the sound source under assessment.
Roadside Nature Reserve	A non-statutory locally designated area along road verges that is managed specifically for its wildlife value.
Scheduled Monument	An archaeological site given legal protection by being placed on a ‘Schedule’ of monuments.
Scottish Marine Licence Application	The application for a Marine Licence under the Marine and Coastal Access Act 2009 for the Scottish Offshore Transmission Infrastructure.

Term	Meaning
Scottish Offshore Transmission Infrastructure (SOfTI)	The Offshore Export Cable(s) in the Scottish Offshore Region (between 12 nm and 200 nm).
Secondary A Aquifers	A geological unit that provides modest groundwater that can support local water supplies and may form an important source of water to rivers.
Secondary B Aquifers	A geological unit that is dominated by low permeability layers that may store and yield limited amounts of groundwater.
Secondary Undifferentiated Aquifer	Where it is not possible to apply either a Secondary A or B definition because of the variable characteristics of the rock type, but generally have only a minor resource value.
Shellfish	For the purposes of this assessment, shellfish is considered a generic term to define molluscs and crustaceans.
Site of Special Scientific Interest	A site designated under the Wildlife and Countryside Act 1981 to protect areas of particular interest due to their rare species of fauna or flora, or important geological or physiological features.
Sound Pressure Level, Lp	The amount of force a sound wave exerts on a surface area perpendicular to the direction of travel. A measure of the variation of sound level over a distance.
Source Protection Zone	Groundwater catchment areas defined by travel time around important potable groundwater abstraction sites to safeguard drinking water quality. Certain land-uses are controlled or prohibited with certain source protection zone areas.
Spawning grounds	Spawning grounds are the areas of water or seabed where fish spawn or produce their eggs.
Special Areas of Conservation	A site designation specified in the Conservation of Habitats and Species Regulations 2017. Each site is designated for one or more of the habitats and species listed in the Regulations. The legislation requires a management plan to be prepared and implemented for each SAC to ensure the favourable conservation status of the habitats or species for which it was designated. In combination with Special Protection Areas and Ramsar sites, these sites contribute to the national site network.
Special Protection Areas	A site designation specified in the Conservation of Habitats and Species Regulations 2017, classified for rare and vulnerable

Term	Meaning
	birds, and for regularly occurring migratory species. Special Protection Areas contribute to the national site network.
Statutory consultee	Organisations that are required to be consulted by an applicant pursuant to section 42 of the Planning Act 2008 in relation to an application for development consent.
Subtidal Zone	The area where the seabed is below the reach of the lowest spring tide.
Transition Joint Bay	An underground structure (located at Landfall) where the Offshore Export Cable(s) and the Onshore Export Cable(s) are connected together.
Transport Assessment	A transport assessment is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport impacts of the scheme and to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport.
Trawls	A fishing method which uses towed nets, used to in fish surveys.
Vessel Monitoring System (VMS)	A system by which fishing vessels automatically broadcast information such as location, speed, and nationality. VMS data is broadcast from fishing vessels at least 12 metres in length within Scottish waters and at least 15 metres in length within English waters.
Water Framework Directive (WFD)	A European Union (EU) directive that establishes a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater. It aims to prevent and reduce pollution, promote sustainable water use, protect and improve the aquatic environment, and mitigate the effects of floods and droughts.
Weston Marsh Onshore Converter Station(s)	The Onshore Converter Station(s) that will connect to the National Grid Weston Marsh Substation.
Zone of Theoretical Visibility	A map, usually digitally produced, showing areas of land within which a development is theoretically visible.

ACRONYMS

Acronym	Description
AA	Annual Average
AADT	Annual Average Daily Traffic
ADD	Acoustic Deterrent Device
AEP	Annual Exceedance Probability
AEZ	Archaeological Exclusion Zone
AIAA	Areas of Intense Aerial Activity
AIL	Abnormal Indivisible Load
AIS	Automatic Identification System
ALARP	As Low As Reasonably Practicable
ALC	Agricultural Land Classification
AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BEIS	Department for Business, Energy and Industrial Strategy
BERR	Business Enterprise and Regulatory Reform
BGS	British Geological Survey
BLM	Bureau of Land Management
BMV	Best and Most Versatile
BOAT	Byways Open to All Traffic
BP	Before Present
BS	British Standard
BSI	British Standards Institute
BSSS	British Society of Soil Science
BTO	British Trust for Ornithology
CaP	Cable Plan
CBRA	Cable Burial Risk Assessment
CCC	The Climate Change Committee
CCME	Canadian Council of Ministers of the Environment
CCRA	Climate Change Risk Assessment
CCS	Carbon Capture and Storage
CD	Chart Datum
CDM	Construction Design Management
CEA	Cumulative Effects Assessment
Cefas	Centre for Environment Fisheries and Aquaculture Science
CFCP	Commercial Fisheries Co-existence Plan
CIfAS	Chartered Institute for Archaeologists Standard
CIEEM	Chartered Institute of Ecology and Environmental Management
CIRIA	Construction Industry Research and Information Association
CIP	Copenhagen Infrastructure Partners
CiTIZAN	Coastal and Intertidal Zone Archaeological Network
CL	Confidence Limit
CMS	Construction Method Statement
CNP	Critical National Priority
CO_2	Carbon dioxide
CO_2e	Carbon dioxide-equivalent

Acronym	Description
CoCP	Code of Construction Practice
CRoW	Countryside and Rights of Way
CSM	Conceptual Site Model
CTMP	Construction Traffic Management Plan
DAS	Digital Aerial Surveys
DBA	Desk-Based Assessment
DCO	Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
DESNZ	Department for Energy Security and Net Zero
DMRB	Design Manual for Roads and Bridges
DOME	Database on the Marine Environment
EA	Environment Agency
EC	European Commission
ECSA	European Subsea Cables UK Association
EEA	European Economic Area
EEZ	Economic Exclusive Zone
EGL3	Eastern Green Link 3
EGL4	Eastern Green Link 4
EIA	Environmental Impact Assessment
EMF	Electromagnetic Field
EMODNet	European Marine Observation and Data Network
EMP	Environmental Management Plan
EOfTI	English Offshore Transmission Infastructure

Acronym	Description
EPD	Environmental Product Declaration
EPS	European Protected Species
EPSM	European Protected Species Mitigation
EQS	Environmental Quality Standard
ERCoP	Emergency Response Cooperation Plan
ETG	Expert Topic Group
ES	Environmental Statement
EU	European Union
EUNIS	European Nature Information System
ExA	Examining Authority
FeAST	Feature Activity Sensitivity Tool
FIR	Fisheries Industry Representative
FLO	Fisheries Liaison Officer
FLOWW	Fishing Liaison with Offshore Wind and Wet Renewables Group
FMMS	Fisheries Management and Mitigation Strategy
FRA	Flood Risk Assessment
FSA	Formal Safety Assessment
GCN	Great Crested Newt
GCR	Geological Conservation Review
GES	Good Environmental Status
GHG	Greenhouse Gas
GLVIA	Guidelines for Landscape and Visual Impact Assessment
GVA	Gross Value Added

Acronym	Description
GWDTE	Groundwater Dependent Terrestrial Ecosystem
HDD	Horizontal Directional Drilling
HE	Historic England
HER	Historic Environment Record
HES	Historic Environment Scotland
HGV	Heavy Goods Vehicle
HMPA	Historic Marine Protected Area
HMWB	Heavily Modified Water Body
HND	Holistic Network Design
HPMA	Highly Protected Marine Area
HRA	Habitats Regulations Assessment
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
IACCF	Inter-Agency Climate Change Forum
IAMMWG	Inter-Agency Marine Mammal Working Group
IAQM	Institute of Air Quality Management
ICES	International Council for the Exploration of the Seas
ICPC	International Cable Protection Committee
IDB	Internal Drainage Board
IEF	Important Ecological Features
IEMA	Institute of Environmental Management and Assessment
IFCA	Inshore Fisheries and Conservation Authority
IMO	International Maritime Organization

Acronym	Description
INNS	Invasive Non-Native Species
IPCC	International Panel on Climate Change
ISAA	Information to Support Appropriate Assessment
IQ	Institute of Quarrying
I-VMS	Inshore Vessel Monitoring Systems
JCDP	Joint Cetacean Data Programme
JNCC	Joint Nature Conservation Committee
LAQM	Local Air Quality Management
KIS-ORCA	Kingfisher Information Service – Offshore Renewable and Cable Awareness
LAT	Lowest Astronomical Tide
LCA	Life Cycle Assessment
LCN	Lincolnshire Connection Node
LCS	Lincolnshire Connection Substation
LCRM	Land Contamination: Risk Management
LDV	Light Duty Vehicle
LERC	Lincolnshire Environmental Records Centre
LGM	Last Glacial Maximum
LITGN	Landscape Institute Technical Guidance Note
LLFA	Lead Local Flood Authority
LNR	Local Nature Reserve
LSE	Likely Significant Effect
LSOA	Lower Super Output Area
LVIA	Landscape and Visual Impact Assessment

Acronym	Description
LWS	Local Wildlife Site
LWTS	Lincolnshire Wildlife Trust Site
MAFF	Ministry of Agriculture, Fisheries and Food
MAGIC	Multi-agency Geographic Information for the Countryside
MAIB	Marine Accident Investigation Branch
MarESA	Marine Evidence Based Sensitivity Assessment
MARPOL	Compliance with the International Convention for the Prevention of Pollution from Ships
MBES	Multi Beam Echo Sounder
MCA	Maritime and Coastguard Agency
MCAA	Marine and Coastal Access Act
MCZ	Marine Conservation Zone
MD-LOT	Marine Directorate Licensing and Operations Team
MDS	Maximum Design Scenario
MGN	Marine Guidance Note
MHCLG	Ministry of Housing, Communities and Local Government
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
MMO[1]	Marine Management Organisation
MMO[2]	Marine Mammal Observer
MMMP	Marine Mammal Mitigation Plan
MOHC	Met Office Hadley Centre
MPA	Marine Protected Area

Acronym	Description
MPCP	Marine Pollution Contingency Plan
MPS	Marine Policy Statement
MSA	Mineral Safeguarding Area
MSFD	Marine Strategy Framework Directive
MSS	Marine Scotland Science
MU	Management Unit
NBN	National Biodiversity Network
NCN	National Cycle Network
NCMPAs	Natural Conservation Marine Protected Areas
NCR	National Cycle Route
NEA	National Environment Agency
NESO	National Energy System Operator
NFFO	National Federation of Fishermen’s Organisation
NGESO	National Grid Electricity System Operator
NGET	National Grid Electricity Transmission
NIA	Noise Important Area
NLB	Northern Lighthouse Board
NMPi	National Marine Plan Interactive
NNR	National Nature Reserve
NO_2	Nitrogen Dioxide
NOx	Nitrous Oxide
NPPF	National Planning Policy Framework
NPS	National Policy Statement

Acronym	Description
NPSE	Noise Policy Statement for England
NRA	Navigation Risk Assessment
NRHE	National Record of the Historic Environment
NRMM	Non-Road Mobile Machinery
NSIP	Nationally Significant infrastructure Project
NSP	Navigational Safety Plan
NSTA	North Sea Transition Authority
NtM	Notice to Mariners
NVC	National Vegetation Classification
NVZ	Nitrate Vulnerable Zone
OESEA4	UK Offshore Energy Strategic Environmental Assessment 4
OMP	Operation and Maintenance Plan
ONS	Office for National Statistics
OREI	Offshore Renewable Energy Installation
OSP	Offshore Substation Platform
OSPAR	Convention for the Protection of the Marine Environmjent of the North-East Atlantic
OWFL	Ossian Offshore Wind Farm Limited
PAD	Protocol for Archaeological Discoveries
PAH	Polycyclic Aromatic Hydrocarbons
PAM	Passive Acoustic Monitoring
PCB	Polychlorinated biphenyls
PDE	Project Design Envelope

Acronym	Description
PEIR	Preliminary Environmental Information Report
PEXA	Practice and Exercise Areas
PIA	Personal Injury Accident
PM	Particulate Matter
PM_{10}	Particulate matter with a diameter of 10 micrometres or less
$PM_{2.5}$	Particulate matter with a diameter of 2.5 micrometres or less
PMF	Priority Marine Feature
PPE	Personal Protective Equipment
PPG	Planning Practice Guidance
PPV	Peak Particle Velocity
PRoW	Public Rights of Way
PWS	Private Water Supply
RAF	Royal Air Force
RBMP	River Basin Management Plan
RCP	Representative Concentration Pathways
REC	Regional Environmental Characterisation
RFG	Regional Fisheries Group
RICS	Royal Institution of Chartered Surveyors
RIVM	Research for Man and Environment
RNLI	Royal National Lifeboat Institution
RNR	Roadside Nature Reserve
RoPax	Roll-on/Roll-off Passenger
ROV	Remotely Operated Vehicle

Acronym	Description
RVAA	Residential Visual Amenity Assessment
RYA	Royal Yachting Association
SAC	Special Area of Conservation
SAR	Search and Rescue
SBP	Sub-Bottom Profiler
SCDS	Supply Chain Development Statement
SEPA	Scottish Environment Protection Agency
SFF	Scottish Fishermen’s Federation
SFRA	Strategic Flood Risk Assessment
SMA	Seal Management Area
SMP-OWE	Sectoral Marine Plan for Offshore Wind Energy
SMU	Seal Management Unit
SNCB	Statutory Nature Conservation Body
SoCC	Statement of Community Consultation
SOfTI	Scottish Offshore Transmission Infrastructure
SOLAS	International Convention for the Safety of Life at Sea
SOPEP	Shipboard Oil Pollution Emergency Plan
SOV	Service Operation Vessel
SPA	Special Protection Area
SPFA	Scottish Pelagic Fishermen’s Association
SPM	Suspended Particulate Matter
SPZ	Source Protection Zone
SSCs	Suspended Sediment Concentrations

Acronym	Description
SSER	SSE Renewables
SSEW	Soil Survey of England and Wales
SSS	Side Scan Sonar
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems
SWFPA	Scottish White Fish Producers Association
TCE	The Crown Estate
THC	Total Hydrocarbon Content
TOC	Total Organic Carbon
TOM	Total Organic Matter
TraC	Transitional and Coastal
TSS	Traffic Separation Scheme
UK	United Kingdom
UK BAP	UK Biodiversity Action Plan
UKCP	United Kingdom Climate Projections
UKCS	United Kingdom Continental Shelf
UNECE	United Nations Economic Commission for Europe
UNSECO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UKHO	UK Hydrographic Office
USAF	United States Air Force
USV	Unmanned Surface Vessel
UXB	Unexploded Bombs

Acronym	Description
UXO	Unexploded Ordnance
VMP	Vessel Management Plan
VMS	Vessel Monitoring System
WeBS	Wetland Bird Survey
WFD	Water Framework Directive
WHO	World Health Organisation
WSI	Written Scheme of Investigation
ZoI	Zone of Influence
ZTV	Zone of Theoretical Visibility

UNITS

Unit	Description
%	Percentage
£	Pound Sterling
°C	Degrees Celsius
cm	Centimetre
dB	Decibel
GT	Gross Tonnes
GW	Gigawatt (power)
ha	Hectares
hrs	Hours
km	Kilometres (distance)
km^2	Square kilometres
kV	Kilovolts
kWh	Kilo Watt Hours
kW/m	Kilowatt per metre
m	Metre (distance)
m^2	Square metres
m/s	Metres per second
MW	Megawatt
nm	Nautical mile (distance)
Q_{95}	flow rate that is equalled or exceeded 95% of the time in a given period
s	Second
t	Tonne

1. INTRODUCTION

1.1. Background

1.1.1.1 This Environmental Impact Assessment (EIA) Scoping Report has been prepared on behalf of Ossian Offshore Wind Farm Limited (Ossian OWFL).

1.1.1.2 Ossian OWFL is developing a floating offshore wind farm (referred to as the 'Ossian Array') located approximately 80 km off the east coast of Scotland. Applications for Section 36 consent and two Marine Licenses were submitted to the Scottish Government (Marine Directorate Licensing and Operations Team (MD-LOT) in June 2024, for consent to construct and operate the Ossian Array. The Array application included the Offshore Substation Platforms (OSPs) as well as interconnector cables between OSPs[1] and these elements do not therefore form part of the Ossian Transmission Infrastructure.

1.1.1.3 The National Energy System Operator (NESO), which manages the supply of electricity within Great Britain, has confirmed that the Ossian Array will connect to the transmission network in Lincolnshire. Ossian OWFL therefore intends to seek consent for transmission infrastructure including Offshore Export Cables to Landfall, Onshore Export Cables and Onshore Converter Stations. This is collectively referred to as the 'Ossian Transmission Infrastructure', which will connect the Ossian Array to the National Grid electricity transmission network. **Figure 1.3.1** shows the area within which the Ossian Transmission Infrastructure will be located.

1.1.1.4 A summary of the key components of the Ossian Transmission Infrastructure is provided in **section 1.2** below, with further details set out in **section 4** of this EIA Scoping Report.

1.1.1.5 This EIA Scoping Report sets out the proposed approach and key topics to be included within the EIA process.

1.2. Project Overview

1.2.1.1 The Ossian Transmission Infrastructure includes the following key components.

- Offshore Transmission Infrastructure which comprises the Offshore Export Cables from the OSPs (which form part of the Array Application) to Landfall. The Offshore Export Cables will be routed through both Scottish and English waters.
- Landfall - This is where the Offshore Export Cables are brought ashore and jointed to the Onshore Export Cables via the Transition Joint Bays. This term applies to the entire area between Mean Low Water Springs (MLWS) up to and including the Transition Joint Bays.
- Onshore Transmission Infrastructure, which includes the following.
  - HVDC Onshore Export Cables - Onshore High Voltage Direct Current (HVDC) cables from the Landfall to the Onshore Converter Stations.
  - Onshore Converter Stations - required to convert HVDC to High Voltage Alternating Current (HVAC) such that the power can be supplied to the National Grid. The Onshore Converter Stations required include:
    - one converter station at the Lincolnshire Connection Node; and
    - up to two converter stations at Weston Marsh.
  - HVAC Onshore Export Cables - Onshore HVAC cables between the Onshore Converter Stations and the points of connection to the National Grid.

1.3. Consenting Approach

1.3.1.1 Ossian OWFL sought directions from the Secretary of State under section 35 of the Planning Act 2008 to confirm that the English Offshore Transmission Infrastructure (EOfTI), Landfall and the Onshore Transmission Infrastructure should be treated as development for which development consent is required under the Planning Act 2008. The following directions were duly made:

- 23 May 2024 in relation to the Landfall and Onshore Transmission Infrastructure; and
- 10 October 2024 in relation to the EOfTI.

1.3.1.2 Together, these section 35 directions confirm that the Onshore Transmission Infrastructure, Landfall and the EOfTI should be treated as development for which development consent is required under the Planning Act 2008. This requires an application for development consent (and deemed Marine Licence) to be made to the Planning Inspectorate. Although two directions were received, Ossian OWFL intend to pursue a single application for development consent, which will cover the Onshore Transmission Infrastructure, Landfall and the EOfTI.

1.3.1.3 The Offshore Transmission Infrastructure located in Scottish waters (the Scottish Offshore Transmission Infrastructure (SOfTI)) requires an application for a Marine Licence under the Marine and Coastal Access Act (MCAA) 2009 to be made to MD-LOT.

1.3.1.4 **Figure 1.3.2** shows those parts of the Ossian Transmission Infrastructure that would be consented under the DCO and those that would be consented through Scottish Marine Licensing.

1.3.1.5 Applications will be made by Ossian OWFL for development consent and a Marine Licence. The applications will be accompanied by a single Environmental Statement (ES) that sets out the environmental effects for all onshore and offshore elements of the Ossian Transmission Infrastructure (including the SOfTI).

[1] The Array Application included reference to the 'proposed offshore export cable corridor(s)' and the 'proposed onshore export cable corridors'. This EIA Scoping Report for the Ossian Transmission Infrastructure relates to that infrastructure, albeit that the terminology has now been refined.

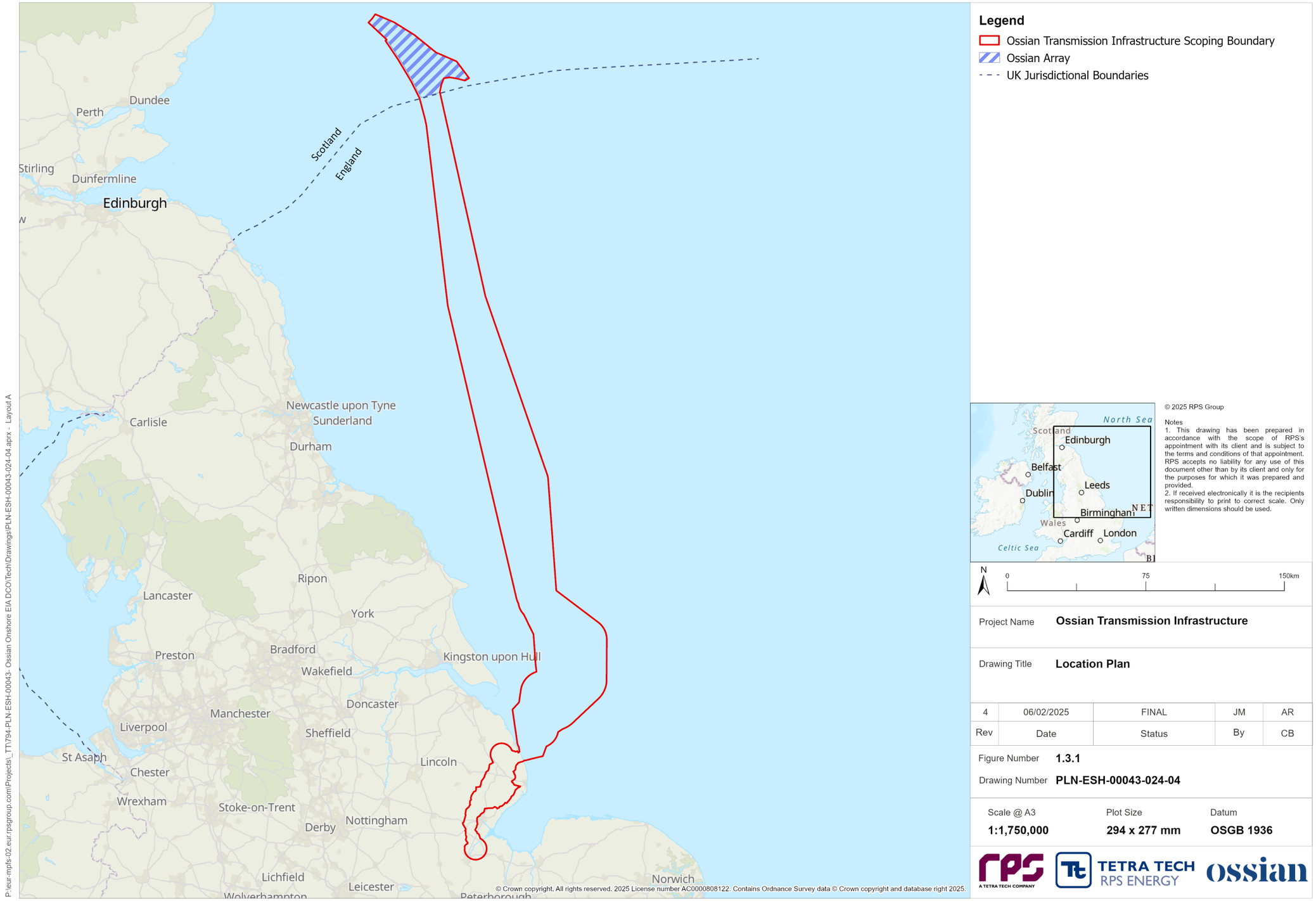
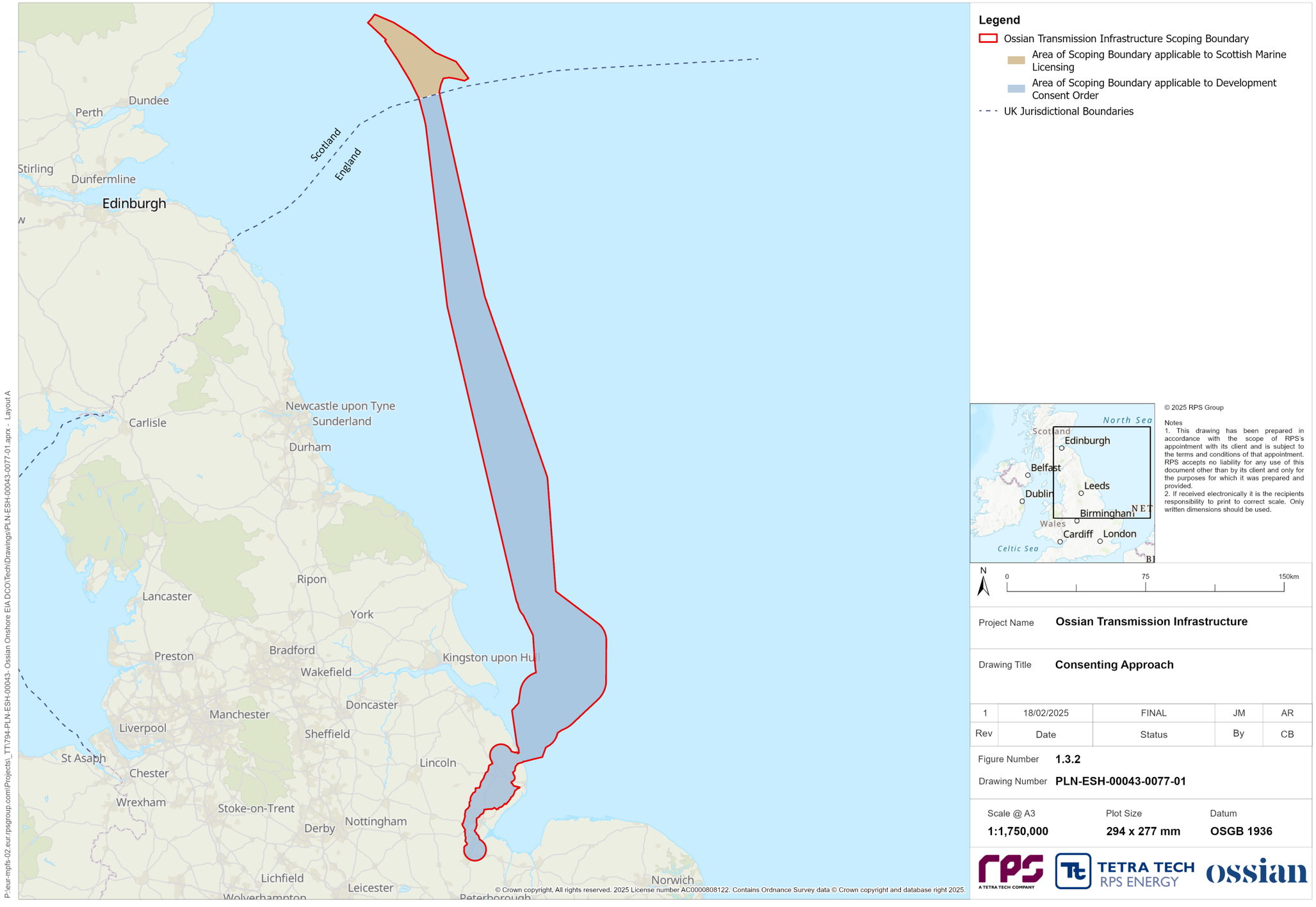


Figure 1.3.1:Location Plan and Scoping Boundary



Legend

- Ossian Transmission Infrastructure Scoping Boundary
- Area of Scoping Boundary applicable to Scottish Marine Licensing
- Area of Scoping Boundary applicable to Development Consent Order
- UK Jurisdictional Boundaries

Notes
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Project Name	**Ossian Transmission Infrastructure**
Drawing Title	**Consenting Approach**

Rev	Date	Status	By	
1	18/02/2025	FINAL	JM	AR

Figure Number	**1.3.2**
Drawing Number	**PLN-ESH-00043-0077-01**

Scale @ A3	Plot Size	Datum
1:1,750,000	**294 x 277 mm**	**OSGB 1936**

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Figure 1.3.2: Consenting Approach

1.4. Purpose of the EIA Scoping Report

1.4.1.1 EIA is the process of identifying and assessing the likely significant effects arising from a project. This requires consideration of the likely changes to the environment, where these arise as a consequence of a project, through comparison with the existing and projected future baseline conditions.

1.4.1.2 The relevant legislative requirements for EIA are set by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (for the Onshore Transmission Infrastructure, Landfall and EOfTI)) and the Marine Works (Environmental Impact Assessment) Regulations 2007 (for the SOfTI). These two sets of Regulations are collectively referred to in this report as 'the EIA Regulations'.

1.4.1.3 This EIA Scoping Report describes the scope and methodology of the technical studies being undertaken to provide an assessment of any likely significant effects and, where necessary, to determine suitable measures to mitigate such effects. It also describes those topics or sub-topics that are proposed to be scoped out of the EIA process and provides justification as to why the Ossian Transmission Infrastructure would not have the potential to give rise to significant environmental effects on these topics.

1.4.1.4 This EIA Scoping Report has been prepared with reference to the Planning Inspectorate's Advice Note Seven (Planning Inspectorate, 2020) and accompanies separate requests for Scoping Opinions in accordance with Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and Regulation 13 of the Marine Works (Environmental Impact Assessment) Regulations 2007. This EIA Scoping Report has been produced such that Scoping Opinions are requested from:

- the Planning Inspectorate with regard to the Onshore Transmission Infrastructure, Landfall and EOfTI; and
- MD-LOT on behalf of Scottish Ministers with regard to the SOfTI.

1.4.1.5 It is also intended that this report will support future technical engagement by Ossian OWFL with statutory and non-statutory consultees and stakeholders, building on consultation and engagement undertaken to date.

1.5. Structure of the EIA Scoping Report

1.5.1.1 This EIA Scoping Report provides the information required at the scoping stage under the EIA Regulations. **Table 1.5.1** summarises the information requirements set out in the EIA Regulations, and where these can be found in this EIA Scoping Report.

Table 1.5.1: Scoping Requirements of the EIA Regulations

EIA Regulation requirement	Where provided
Infrastructure Planning (Environmental Impact Assessment) Regulations 2017	
A plan sufficient to identify the land (Regulation 10(3)a)	See **Figure 1.3.1.**
A description of the proposed development, including its location and technical capacity (Regulation 10(3)b).	**Section 4**: Project Description, of this EIA Scoping Report provides a description of the Ossian Transmission Infrastructure, including details of temporary and permanent infrastructure.
An explanation of the likely significant effects of the development on the environment (Regulation 10(3)c).	**Sections 6, 7** and **8** of this EIA Scoping Report provide a description of the likely significant effects on the environment arising from the Ossian Transmission Infrastructure.
Such other information or representations as the person making the request may wish to provide or make (Regulation 10(3)d).	Further information is provided in **sections 9** and **10**, of this EIA Scoping Report, which includes proposed supporting technical information and identifies topics proposed to be scoped out of the ES.
Marine Works (Environmental Impact Assessment) Regulations 2007	
A chart, plan or map sufficient to identify the location of the regulated activity and of other activities to be carried out in the course of the project (Schedule 4, 1 (a)).	See **Figure 1.3.1.**
A brief description of the specific characteristics of the regulated activity and the project, including their nature, purpose, location and technical capacity (Schedule 4, 1 (b)).	**Section 4**: Project Description, of this EIA Scoping Report provides a description of the Ossian Transmission Infrastructure, including details of temporary and permanent infrastructure.
An explanation of the likely significant effects of the regulated activity and the project on the environment (Schedule 4, 1 (ba)).	**Sections 6, 7** and **8** of this EIA Scoping Report provide a description of the likely significant effects on the environment arising from the Ossian Transmission Infrastructure.
Such other information or representations as the applicant may wish to provide or make (Schedule 4, 1 (c)).	Further information is provided in **sections 9** and **10** of the EIA Scoping Report, which includes proposed supporting technical information and identifies topics proposed to be scoped out of the ES.

1.5.1.2 The structure of this EIA Scoping Report is presented within **Table 1.5.2**.

Table 1.5.2: Structure of this EIA Scoping Report

Section	Topic	Author
Part 1		
1	Introduction	RPS
2	Consenting Process	RPS
3	Site Selection and Consideration of Alternatives	RPS
4	Project Description	RPS
5	Approach to EIA	RPS
Part 2		
6	**Assessment of Effects – Offshore Environment**	
6.1	Introduction	RPS
6.2	Physical Processes	RPS
6.3	Benthic Subtidal and Intertidal Ecology	RPS
6.4	Fish and Shellfish Ecology	RPS
6.5	Marine Mammals	RPS
6.6	Offshore Ornithology	RPS
6.7	Commercial Fisheries	RPS
6.8	Shipping and Navigation	Anatec
6.9	Marine Archaeology	RPS
6.10	Infrastructure and Other Sea Users	RPS
6.11	Water Quality	RPS
Part 3		
7	**Assessment of Effects – Onshore Environment**	
7.1	Introduction	RPS
7.2	Geology Hydrogeology and Ground Conditions	RPS
7.3	Hydrology and Flood Risk	RPS
7.4	Onshore Ecology and Nature Conservation	RPS
7.5	Onshore and Intertidal Ecology	RPS
7.6	Historic Environment	RPS
7.7	Land Use and Recreation	RPS
7.8	Traffic and Transport	RPS
7.9	Noise and Vibration	RPS
7.10	Air Quality	RPS
7.11	Landscape and Visual Resources	RPS
7.12	Health and Wellbeing	RPS
Part 4		
8	**Assessment of Effects – Offshore and Onshore Environment**	
8.1	Introduction	RPS
8.2	Socio-economics	BiGGAR Economics
8.3	Climate Change	RPS
9	Other Assessments	RPS
10	Topics Proposed to be Scoped out	RPS
11	Summary	RPS
12	References	RPS
Part 5: Appendices		
5.1	Transboundary Impacts	RPS
9.1	Marine Conservation Zone Screening Report	RPS
9.2	Offshore Water Framework Directive Screening Report	RPS
9.3	Onshore Water Framework Directive Screening Report	RPS

1.6. The Applicant and the EIA Team

1.6.1.1 Ossian OWFL is a joint venture project, led by SSE Renewables (SSER), along with partners Marubeni Corporation and Copenhagen Infrastructure Partners (CIP).

1.6.1.2 SSER is a leading developer, owner and operator of renewable energy projects across the United Kingdom (UK) and Ireland, with a significant portfolio of almost 5 GW of offshore projects.

1.6.1.3 CIP is the world's largest dedicated fund manager within greenfield renewable energy investments and a global leader in offshore wind. The funds managed by CIP have, to date, raised approximately EUR 26 billion for investments in energy

and associated infrastructure from more than 150 international institutional investors.

1.6.1.4 Marubeni Corporation is a Japanese conglomerate with extensive interests in power generation and renewable energy with an involvement in the development and operation of over 2 GW of onshore and offshore wind farms.

1.6.1.5 RPS has been contracted by Ossian OWFL to provide this EIA Scoping Report for the Ossian Transmission Infrastructure.

1.6.1.6 The scoping stage has included an initial review of the key environmental issues associated with the construction, operation and maintenance and decommissioning of the Ossian Transmission Infrastructure to inform the EIA Scoping Report. The EIA team responsible for drafting this report includes a number of topic specialists, as set out in **Table 1.5.2**.

1.6.1.7 In accordance with Regulation 14(4) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, as amended, and Regulation 12 of the Marine Works (Environmental Impact Assessment) Regulations 2007, the ES will be prepared by competent experts. The ES will outline the relevant expertise of those experts.

2. CONSENTING PROCESS

2.1. Introduction

2.1.1.1 This section provides an overview of the consenting process for the Ossian Transmission Infrastructure, including policy relevant to renewable development in the UK.

2.2. The Consenting Process

2.2.1 The Planning Act 2008

2.2.1.1 As set out in **section 1.3**, Ossian OWFL sought directions from the Secretary of State under section 35 of the Planning Act 2008 to confirm that the Onshore Transmission Infrastructure, Landfall and those offshore elements located within English waters (the EOfTI) should be treated as development for which development consent is required under the Planning Act 2008. As set out in **paragraph 1.3.1.1,** the section 35 directions were duly made.

2.2.1.2 For developments that are to be determined under the Planning Act 2008, the key stages in the application process are set out in **Figure 2.2.1**. EIA is undertaken at the pre-application stage, with the ES submitted as part of the application for development consent.

2.2.1.3 Applications for development consent are examined by an Examining Authority appointed by the Planning Inspectorate and determined by the Secretary of State. Consent takes the form of a Development Consent Order (DCO). It is noted that the Examining Authority is, subject to limited exceptions, under a statutory obligation to complete the examination within six months, as shown on **Figure 2.2.1**.

2.2.1.4 The Government has published a consultation on reform to the consenting process (Department for Levelling Up, Housing and Communities, 2023). This document and the published outcome report (Department for Levelling Up, Housing and Communities, 2024) set out proposed reforms to deliver commitments to making the consenting process under the Planning Act 2008 better, faster, greener, fairer and more resilient. This includes a commitment to regular review of application processes to provide a clear strategic direction for infrastructure planning. This is reflected in a suite of recent guidance from the Planning Inspectorate, including the Pre-Application Prospectus, which introduced three new pre-application service tiers (basic, standard and enhanced, the latter of which could include a fast-track option) for seeking consent. The standard service tier (Tier 2, which is applicable to the Ossian Transmission Infrastructure) enables applications to be accepted for examination and examined within a proportionate period, within the statutory maximum of six months.

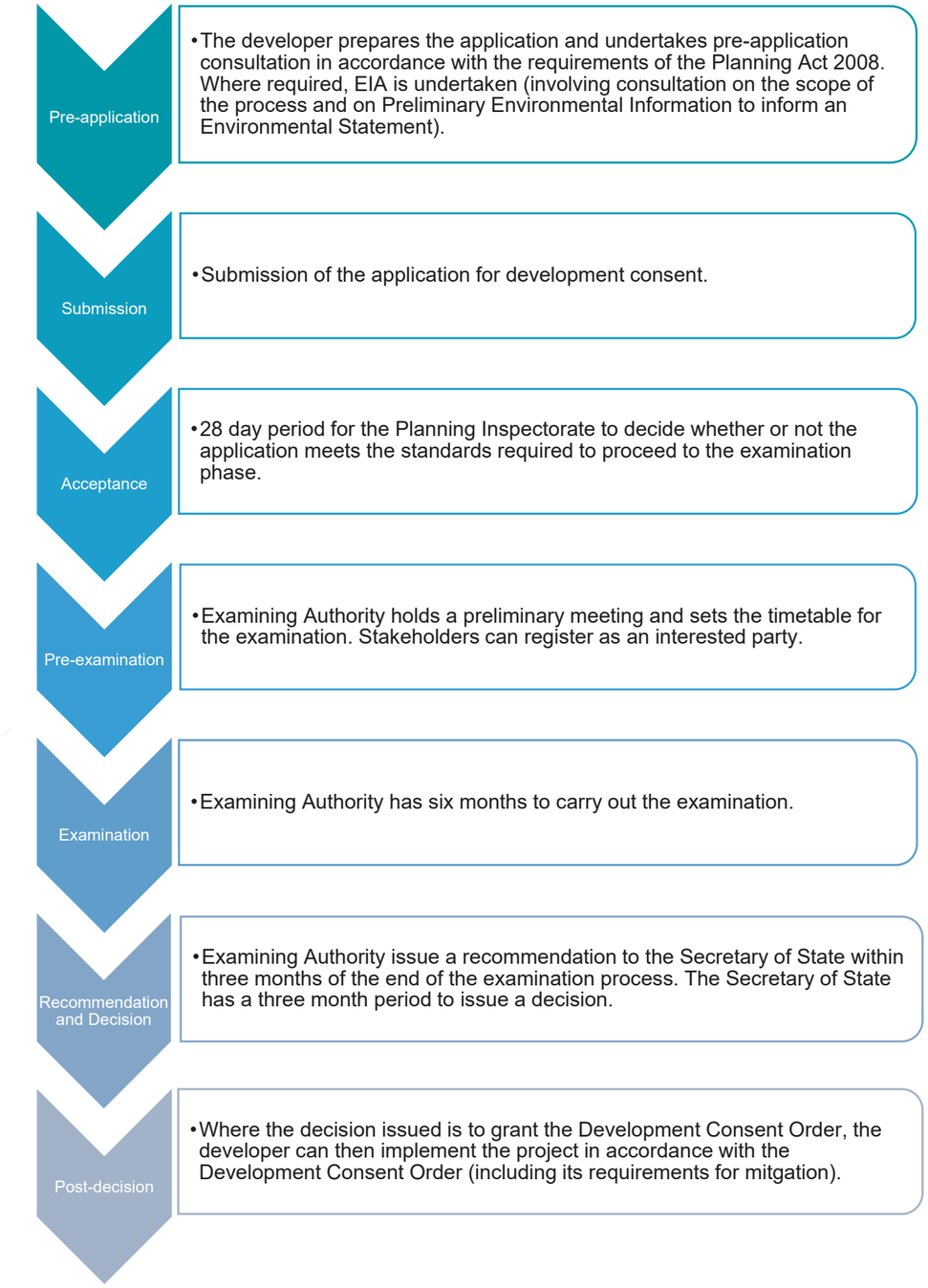


Figure 2.2.1: Overview of the Consenting Process

2.2.2 Marine and Coastal Access Act 2009

2.2.2.1 Parts three and four of the MCAA 2009 introduced a new marine planning and licensing system for overseeing the marine environment and a requirement to obtain a Marine Licence for certain activities and works at sea (works between 12 nm and up to 200 nm offshore). Section 149A of the Planning Act 2008 allows applicants for development consent to apply for 'deemed marine licences' as part of the consenting process. This statutory provision therefore permits that a DCO may include a Marine Licence that has been deemed to have been issued under Part 4 of the MCAA 2009. The Marine Management Organisation (MMO) is a consultee under the Planning Act 2008 for the purpose of the consenting and deemed licensing process, and the MMO remains the regulatory compliance monitoring and enforcement body in respect of the conditions contained within the deemed Marine Licences.

2.2.2.2 The SOfTI will require a Marine Licence under the MCAA 2009 for the construction works and activities associated with the deposit/installation of the Offshore Export Cables on the seabed, and potential cable protection on the seabed. This license is granted by Scottish Ministers. An application will be prepared for submission to MD-LOT acting on behalf of the Scottish Ministers. This will be prepared in parallel with the application for development consent for the Onshore Transmission Infrastructure, Landfall and EOfTI.

2.2.3 National Policy Statements

2.2.3.1 When determining applications for consent under the Planning Act 2008, the Secretary of State may have regard to:

- any national policy statement which has effect in relation to development of the description to which the application relates;
- the appropriate marine policy documents;
- any local impact report;
- any matters prescribed in relation to development of the description to which the application relates; and
- any other matters which the Secretary of State thinks are both important and relevant to its decision (section 104(2) of the Planning Act 2008).

2.2.3.2 Section 104(3) of the Planning Act 2008 highlights the importance of National Policy Statements (NPSs) in relation to decision-making. The NPSs relevant to the Onshore Transmission Infrastructure, Landfall and the EOfTI (and confirmed in the section 35 directions as applicable) are as follows.

- Overarching NPS for Energy (NPS EN-1) which sets out the UK Government's policy for the delivery of major energy infrastructure (Department for Energy Security & Net Zero, 2023a). NPS EN-1 establishes the need case for offshore wind and transmission projects.
- NPS for Renewable Energy Infrastructure (NPS EN-3) (Department for Energy Security & Net Zero, 2023b).
- NPS for Electricity Networks Infrastructure (NPS EN-5) (Department for Energy Security & Net Zero, 2023c).

2.2.3.3 Policy contained within the NPSs will be set out within the topic chapters of the ES, where relevant. In addition, it will be considered within the Planning Statement and supporting policy trackers to be submitted as part of the application for development consent.

2.2.4 Other Relevant National Planning Policy

2.2.4.1 The National Planning Policy Framework (NPPF) was published in 2012 and has been regularly updated with the latest version published in December 2024 (Ministry of Housing, Communities and Local Government and Department for Levelling Up, Housing and Communities, 2024). The NPPF sets out the Government's planning policies for England.

2.2.4.2 Although the NPPF primarily relates to the application of the Government's planning policies to the determination of applications under the Town and Country Planning Act 1990 (as amended), NPS EN-1 sets out that the NPPF is also considered important and relevant to decision-making under the Planning Act 2008. At paragraph 4.1.11, NPS EN-1 states that the energy NPSs have taken account of the NPPF, where appropriate. However, in the event of any conflict between the NPPF and an NPS, the NPS prevails (paragraph 4.1.15 of NPS EN-1).

2.2.4.3 The relevant policies from the NPPF will be set out within the topic chapters of the ES, where relevant. In addition, they will be considered within the Planning Statement and supporting policy trackers to be submitted as part of the application for development consent.

2.2.5 Marine Policy

2.2.5.1 The UK-wide Marine Policy Statement (MPS) was published in March 2011, under the MCAA 2009, in order to provide a framework for marine spatial planning, specifically for the preparation of marine plans and taking decisions that affect the marine environment (Department for Environment, Food and Rural Affairs (Defra), 2011). The MMO has taken a regional approach to the development of marine plans in English waters.

2.2.5.2 In relation to Scottish waters, the Scottish National Marine Plan was adopted in 2015, covering the management of both the Scottish inshore region (between 0 nm and 12 nm) and Scottish offshore region (between 12 nm to 200 nm). The National Marine Plan '*sets out strategic policies for the sustainable development of Scotland's marine resources and is compatible with the UK MPS and existing Marine Plans across the UK'* (Marine Scotland, 2015a).

2.2.5.3 The National Marine Plan was reviewed in 2021 (Marine Scotland, 2021). At the time of writing, an updated National Marine Plan 2 is currently being discussed with relevant stakeholders, with the aim of delivering a plan that considers the changes to the policy and legislative landscape, rapid developments in technology and the need to achieve a green recovery from the COVID-19 pandemic, as well as reflecting the improved understanding of the marine environment and the successful delivery of the Blue Economy Approach (Marine Scotland, 2022).

2.2.5.4 The draft Sectoral Marine Plan for Offshore Wind Energy (SMP-OWE) was adopted by Scottish Ministers in 2020 (Scottish Government, 2020). To consider the impacts of the projects awarded Options Agreements by the Crown Estate Scotland in the 2021 leasing round and clearing process, which totalled 27.6 GW, the SMP-OWE required updating and re-assessment. A consultation on a draft, updated SMP-OWE is anticipated for Spring 2025 with a final draft plan expected in Autumn 2025, for adoption and publication to follow shortly after. The policy will continue to have a plan-led approach.

2.2.5.5 Policy set out within the MPS, relevant regional marine plans, the National Marine Plan and the relevant version of the SMP-OWE will be set out within the topic chapters of the ES, where relevant. In addition, it will be considered within the Planning Statement and supporting policy trackers to be submitted as part of the application for development consent and the application for the Marine Licence.

2.2.6 Local Planning Policy

2.2.6.1 The Planning Act 2008 does not incorporate section 38(6) of the Planning and Compulsory Purchase Act 2004, which provides the principal basis in legislation for the determination of planning applications under the Town and Country Planning Act 1990, namely that they must be determined in accordance with the statutory development plan unless material considerations indicate otherwise.

2.2.6.2 Nevertheless, NPS EN-1 (at paragraph 4.1.12) states that local planning documents may be considered to be both important and relevant to decision-making. Where a project conflicts with a proposal in a draft Development Plan, the Secretary of State should take account of the stage that the Development Plan document has reached in deciding what weight to give to the plan for the purposes of determining the planning significance of what is replaced, prevented, or precluded (paragraph 4.1.13).

2.2.6.3 Paragraph 4.1.15 of NPS EN-1 states that in the event of a conflict between local planning policy documents and an NPS, the NPS prevails (in line with section 104 of the Planning Act 2008).

2.2.6.4 Key local planning policies relevant will be considered during the EIA process, where relevant. These will include those set out in **Table 2.2.1**.

Table 2.2.1: Key Local Planning Policy

Local Authority	Adopted Plan	Emerging Policy
South East Lincolnshire Joint Strategic Planning Committee	South East Lincolnshire Local Plan 2011-2036 (adopted 2019).	The South East Lincolnshire Joint Strategic Planning Committee is a partnership of Boston Borough, South Holland District and Lincolnshire County Councils who have worked together to create a single Local Plan for South East Lincolnshire[2]. The Planning Committee met in July 2024 to consider a report on the five-year review of the South East Lincolnshire Local Plan. Based on the review, the Joint Committee concluded that there is no requirement to update the Local Plan at this time.
East Lindsey District Council	Easy Lindsey Local Plan (adopted 2018).	East Lindsey District Council are currently undertaking a partial review of the Local Plan. An 'Issues and Options' consultation under Regulation 18 was carried out in 2021/22, which set out issues to be considered in the partial review and suggested options in relation to these. The Council also undertook a call for sites between February and April 2021, with potential sites being sought for both housing and employment land. The Issues and Options Consultation Draft Plan does not include proposed allocations at this stage.
Lincolnshire County Council	Lincolnshire Minerals and Waste Local Plan 2016-2031 (Part 1 adopted 2016, Part 2 adopted 2017).	Lincolnshire County Council are in the process of updating the minerals and waste local plan to guide the future provision of minerals and waste development across Lincolnshire. The updated plan will replace both parts of the adopted plan and cover the period to 2041. A 'Preferred Approach' consultation under Regulation 18 was carried out between July and September 2024, and the County Council will now update the draft plan and undertake a further round of consultation under Regulation 19. Lincolnshire County Council has also approved a position statement regarding energy infrastructure (Lincolnshire County Council, 2023). This outlines how the Council will respond to applications for development consent, with specific consideration given to the protection of agricultural land and landscape impacts, alongside amenity considerations and information on the negotiation of community benefits arising out of such projects.

[2] This plan only covers the areas of South Holland District Council and Boston Borough Council. While Lincolnshire County Council is part of the committee which produces the Local Plan they are not party to taking any decisions on planning applications within this structure.

2.2.7 Other Relevant Legislation

Marine and Coastal Access Act 2009

2.2.7.1 In addition to the requirements for Marine Licences, as set out in **section 2.2.2** above, Part 5 of the MCAA 2009 enables the designation of Marine Conservation Zones (MCZs) in England and Wales as well as UK offshore areas. Consideration of MCZs is required for any Marine Licence application or application for development consent which includes a deemed Marine Licence. The approach to MCZ Assessment for the EOfTI is set out in **section 9** of this EIA Scoping Report.

Habitats Regulations Assessment

2.2.7.2 The Conservation of Habitats and Species Regulations 2017 (as amended) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 require the assessment of effects on internationally important nature conservation sites.

2.2.7.3 These have been traditionally referred to as European Sites or Natura 2000 sites. Following the UK's departure from the European Union (EU), such sites in the UK are now referred to as the National Site Network. The assessment is to be undertaken by the 'competent authority' which, in the case of the Ossian Transmission Infrastructure, is the Secretary of State for Energy Security and Net Zero (in respect of the EOfTI, Landfall and the Onshore Transmission Infrastructure) and the Scottish Ministers (in respect of the SOfTI). The approach to Habitats Regulations Assessment for the Ossian Transmission Infrastructure is set out in **section 9** of this EIA Scoping Report.

2.2.7.4 The Habitats Regulations also provide protection for certain species of plants and animals, referred to as European Protected Species. These regulations set out those species that are protected and the activities that are prohibited, such as deliberate disturbance or creating damage to a breeding place. This protection will be taken into account within relevant chapters of the ES.

Environment Act 2021

2.2.7.5 The Environment Act sets out targets, plans and policies for environmental protection. Schedule 15 sets out provisions for biodiversity net gain and amends the Planning Act 2008.

2.2.7.6 The Environment Act 2021 includes provisions applying certain biodiversity net gain requirements to projects consented under the Planning Act 2008. This is not yet in effect but draft guidance and further information is anticipated to be published soon. This will be considered by the Applicant once available. The approach to net gain will be set out within the application for the Ossian Transmission Infrastructure and reflected in the ES within topic chapters, where relevant.

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017

2.2.7.7 These regulations set out objectives for surface and groundwater bodies, including water quality with the aim of improving the water environment. Objectives are set for waterbodies in terms of their status.

2.2.7.8 The approach to assessment under the Water Framework Directive for the Ossian Transmission Infrastructure is set out in **section 9** of this EIA Scoping Report.

Decommissioning

2.2.7.9 Statutory requirements in relation to the decommissioning of offshore renewable infrastructure are set out in Sections 105 to 114 of the Energy Act 2004 (as amended by the Energy Act 2008 and the Scotland Act 2016). This legislation sets out the requirement for a Decommissioning Programme to be submitted to the Scottish Ministers or the Secretary of State and granted approval prior to decommissioning of the relevant infrastructure. Decommissioning Programmes are expected to include decommissioning standards, financial security, residual liability, and industry cooperation and collaboration.

2.3. Climate Change Policy and the Need for the Project

2.3.1 Need for the Ossian Transmission Infrastructure

2.3.1.1 The need for offshore wind and transmission infrastructure is set out within NPS EN-1 and confirmed within NPSs EN-3 and EN-5.

2.3.1.2 NPS EN-1 defines critical national priority infrastructure, which includes:

- all offshore generation that does not involve fossil fuel combustion (the Ossian Array falls within this category);
- electricity grid infrastructure; and
- energy infrastructure directed into the Nationally Significant Infrastructure Project (NSIP) regime under section 35 of the Planning Act 2008.

2.3.1.3 NPS EN-1 sets out the urgent need for new electricity generating capacity to meet the UK's net zero target by 2050. Paragraphs 3.3.62 and 4.2.4 of NPS EN-1 confirm that the Government:

'… has concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure.'

2.3.1.4 In the section 35 directions, the Planning Inspectorate confirmed that the Onshore Transmission Infrastructure, Landfall and the EOfTI are 'nationally significant'. Given that this infrastructure is required to connect the Ossian Array, is electricity grid infrastructure subject to section 35 directions, and has been confirmed to be nationally significant, it is considered that this infrastructure comprises CNP infrastructure.

2.3.1.5 Paragraph 3.3.63 of NPS EN-1 confirms that the:

'Government strongly supports the delivery of CNP Infrastructure, and it should be progressed as quickly as possible'.

2.3.1.6 Paragraphs 3.2.6 to 3.2.8 of NPS EN-1 state that:

'The Secretary of State should assess all applications for development consent for the types of infrastructure covered by this NPS on the basis that the government has demonstrated that there is a need for those types of infrastructure which is urgent, as described for each of them in this Part.

In addition, the Secretary of State has determined that substantial weight should be given to this need when considering applications for development consent under the Planning Act 2008.

The Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS.'

2.3.1.7 Paragraph 4.2.6 of NPS EN-1 states that the overarching need case and the substantial weight to be given to this need in assessing applications, as set out in paragraphs 3.2.6 to 3.2.8 of EN-1, is the starting point for all assessments of energy infrastructure applications. The ES will not therefore need to demonstrate the need for the Ossian Transmission Infrastructure.

2.3.2 International Climate Change Commitments

2.3.2.1 The United Nations Framework Convention on Climate Change (UNFCCC) is an intergovernmental treaty that came into force on 21 March 1994. To date, the UNFCCC has been ratified by 197 signatories, including the UK. The first agreement under the UNFCCC was the Kyoto Protocol, which was signed in 1997.

2.3.2.2 The UK is a signatory to the Kyoto protocol. The protocol came into effect in 2005, and its commitments were transposed into UK law by the Climate Change Act 2008, as amended.

2.3.2.3 In December 2015, 195 signatories, including the UK, adopted the first universal, legally binding global climate deal at the Paris climate conference (COP21). The Paris Agreement seeks to reduce global greenhouse gas emissions and to limit the global temperature increase in this century to 'well below' 2°C, while pursuing the means to limit this further to 1.5°C. This was ratified by the UK Government in November 2016 and is a binding international treaty.

2.3.2.4 At the COP26 summit in November 2021, nearly 200 parties voted to adopt the Glasgow Climate Pact (UNFCCC, 2021). This includes commitments to phase down the use of coal and supports a common timeframe and methodology for national commitments on emissions reductions.

2.3.2.5 The COP28 summit, held in November/December 2023, resulted in a decision to accelerate action across all areas by 2030, including a call on governments to transition away from fossil fuels to renewables such as wind and solar power in their next round of climate commitments. The COP29 summit held in November 2024 sought to establish a new climate finance goal reflecting the scale and urgency of the climate challenge.

2.3.3 UK Climate Change and Renewable Energy Commitments

2.3.3.1 In addition to the policy context set out by the NPSs and international commitments above, a range of UK climate change commitments are relevant to the Ossian Transmission Infrastructure, as summarised in **Table 2.3.1** below.

Table 2.3.1: UK Climate Change and Renewable Energy Commitments

Relevant Commitment	Summary
The Climate Change Act 2008 (as amended)	Originally committed the UK to a net reduction in greenhouse gas emissions of 80% by 2050 against a 1990 baseline. The Climate Change Act 2008 (2050 Target Amendment) Order 2019 extended that target to at least 100% against the 1990 baseline.
The Energy Act 2013	Introduced a legislative framework for delivering secure, affordable and low carbon energy. It included provisions to incentivise investment in low carbon electricity generation, ensure security of supply, and help the UK meet its emission reduction and renewables targets. In particular, the Energy Act 2013 contained provisions for Electricity Market Reform.
The Clean Growth Strategy 2017 (HM Government, 2017)	Emphasised the need to grow national income, while cutting greenhouse gas emissions. Its aim to achieve clean growth, while ensuring an affordable energy supply for businesses and consumers, is at the heart of the UK's Industrial Strategy.
National Infrastructure Assessment 2018 (National Infrastructure Commission, 2018) and 2023 (National Infrastructure Commission, 2023).	The first National Infrastructure Assessment highlighted the need for the UK to have low cost and low carbon electricity. The second National Infrastructure Assessment highlights that there is still progress to be made to address three key challenges: • decarbonising energy and achieving net zero emissions; • supporting economic growth across all regions; and • improving climate resilience and the environment. With regards to energy security, the report states that: '*by 2035, the UK needs a reliable electricity system running mostly on renewable power. Government should accelerate the deployment of offshore wind, onshore wind and solar power*.'
The UK Offshore Wind Sector Deal 2019 (HM Government, 2020a).	The UK Government published the Offshore Wind Sector Deal in 2019, which sets the key commitments and actions from the UK Government to support offshore wind energy development.
National Infrastructure Strategy 2020 (HM Treasury, 2020)	The National Infrastructure Strategy was published in November 2020 and sets out the plan for the UK's infrastructure revolution, alongside the plans for levelling up. Commitments include: • significant investment in offshore wind and into modern ports and manufacturing infrastructure to expand the share of energy generation from renewables; and • supporting jobs and growth across the UK, particularly in post-industrial and coastal towns.
The Ten Point Plan for a Green Industrial Revolution 2020 (HM Government, 2020c)	The Ten Point Plan notes that offshore wind is a critical source of renewable energy for our growing economy and that by 2030 the Government plans to quadruple our offshore wind capacity, backing new innovations to make the most of this proven technology and investing to bring new jobs and growth to our ports and coastal regions.
The Energy White Paper: Powering our Net Zero Future 2020 (HM Government, 2020d)	The Energy White Paper set a net zero target for 2050 and outlined how this may be achieved. It relates to the generation, supply and use of energy with the drive towards net zero by 2050 at its core. In particular, the introduction of the White Paper set out an aim to quadruple offshore wind capacity by 2030, '*backing new innovations to make the most of this proven technology and investing to bring new jobs and growth to our ports and coastal regions'*. It included a target for 40 GW of offshore wind by 2030 (in line with the National Infrastructure Strategy).
Net Zero Strategy: Build Back Greener 2021 (HM Government, 2021a)	Sets out the long-term plan to end the UK's contribution to man-made climate change by 2050. The key policies in the strategy include that: • by 2035 the UK will be powered entirely by clean electricity, subject to security of supply; and • 40 GW of offshore wind will be delivered by 2030.

Relevant Commitment	Summary
British Energy Security Strategy 2022 (BEIS and Prime Minister's Office, 2022)	The strategy plans to accelerate delivery of offshore wind by strengthening the renewable NPSs to reflect the importance of energy security and net zero. It proposes work with an Offshore Wind Acceleration Task Force to work on reducing the consenting and delivery times for offshore wind projects and fast tracking priority projects, including the development of an Offshore Wind Environmental Improvement Package. Specifically, the strategy states an ambition to deliver up to 50 GW of offshore wind by 2030, an increase on previous targets of 40 GW.
Powering Up Britain: The Net Zero Growth Plan 2023 (HM Government, 2023).	The plan confirmed the UK's commitment to having a decarbonised power system by 2035, with the majority of power generated from renewable sources such as wind and solar. It targets an increase to 50 GW of offshore wind capacity by 2030.
Carbon Budget Delivery Plan (HM Government, 2023)	The plan demonstrates how the legislated Carbon Budgets 4, 5 and 6 will be enabled, up to 2037 through setting out a package of proposals and policies and their anticipated emissions reductions (where quantified) to 2037. The plan includes timescales for the expectation of the proposals and policies to take effect. In May 2023, the Carbon Delivery Budget was ruled unlawful by the High Court. In May 2023, the Government stated that a redraft of the plan would take place within the next 12 months. At the time of writing no further update is available.
Great British Energy (DESNZ, 2024)	The new Government has confirmed its commitment to renewable energy, including offshore wind. This includes a commitment to future offshore wind projects, including making Britain a clean energy superpower by 2030, as set out in the Great British Energy founding statement. Great British Energy is proposed to be a new, publicly owned, clean energy company which will work with DESNZ.
Connections Action Plan (DESNZ and Ofgem, 2023)	This plan seeks speed up connections to the electricity network across Great Britain.
The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019	Introduces binding targets on the Scottish Government to reduce net Scottish greenhouse gas emissions by at least 100% by 2045 from 1990 levels, with interim targets of at least: • 56% by 2020; and • 90% by 2040.
The Scottish Energy Strategy: The Future of Energy in Scotland (Scottish Government, 2017)	Sets out the Scottish Government's vision for the future energy system in Scotland. The strategy outlines six priorities around Scotland's 2050 vision: • consumer engagement and protection; • energy efficiency; • system security and flexibility; • innovative local energy systems; • renewable and low carbon solutions; and • oil and gas industry strengths.
Draft Energy Strategy and Just Transition Plan (Scottish Government, 2023a)	Sets out the plan for Scotland to transition towards cleaner energy generation to ensure they meet the 2050 vision laid out in the Scottish Energy Strategy.
National Planning Framework 4 (Scottish Government, 2023b)	Long term strategy adopted in 2023 by the Scottish Government, which expresses plans for development, and investment, in infrastructure to meet the 2045 net zero target. In relation to renewable energy and specifically offshore wind energy, one of the key visions for Scotland's development is that proposals '*for all forms of renewable, low-carbon and zero emissions technologies will be supported*' for the enhancement of the low carbon economy and help Scotland move towards low carbon energy generation, both onshore and offshore.

3. SITE SELECTION AND CONSIDERATION OF ALTERNATIVES

3.1. Introduction

3.1.1.1 Regulation 14 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires:

'a description of the reasonable alternatives studied by the applicant, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment…'

3.1.1.2 An equivalent requirement is set out in Regulation 12 of the Marine Works (Environmental Impact Assessment) Regulations 2007.

3.1.1.3 The requirement set out in both sets of EIA Regulations will be addressed within the site selection chapter of the ES.

3.1.1.4 This section of the EIA Scoping Report sets out the work undertaken by the Applicant to date in identifying the Ossian Transmission Infrastructure Scoping Boundary shown on **Figure 1.3.1**.

3.1.1.5 As explained in **section 4** of this EIA Scoping Report, the Scoping Boundary is the area within which the Ossian Transmission Infrastructure will be located and within which site selection work is currently being undertaken.

3.1.1.6 Within the Ossian Transmission Infrastructure Scoping Boundary, the following areas have been identified.

- Offshore Scoping Boundary (in Scottish offshore and English waters). All elements of the Ossian Transmission Infrastructure Scoping Boundary seaward of MLWS. It should be noted that the portion of the Offshore Scoping Boundary in Scottish waters encompasses the Array Site Boundary (within which the Array will be located).
- Intertidal Scoping Boundary (in English territorial waters and on English land). All elements of the Ossian Transmission Infrastructure Scoping Boundary between MLWS and Mean High Water Springs (MHWS).
- Onshore Scoping Boundary. All elements of the Ossian Transmission Infrastructure Scoping Boundary landward of MHWS.

3.2. Site Selection Process

3.2.1.1 NPS EN-5 acknowledges at section 2.2 that the initiating and terminating points for transmission infrastructure may not be substantially within the control of the Applicant. Ossian OWFL has, however, developed a staged approach to site selection for the following key elements for which it can manage, or which inform, the routing and site selection process.

- Stage 1: Identification of the Array location.
- Stage 2: Identification of the onshore grid connection locations.
- Stage 3: Identification of broad study areas for key components, including the Offshore Export Cable Corridors, Landfall, Onshore Converter Stations and Export Cable Corridors.
- Stage 4: Identification and assessment of Landfall Search Areas.
- Stage 5: Identification of the preferred Landfall site.
- Stage 6: Assessment of Onshore Converter Station locations and identification of preferred options.
- Stage 7: Assessment of Onshore Export Cable Corridors and identification of the preferred route corridors.

3.2.1.2 This process is ongoing. The starting point for the identification of the Ossian Transmission Infrastructure Scoping Boundary is:

- the location of the Ossian Array (Stage 1), for which an application for consent under section 36 of the Electricity Act 1989 and associated marine licences has already been submitted to the Scottish Ministers; and
- the points of connection of the Ossian Transmission Infrastructure to the electricity transmission system (often referred to as the National Grid) (Stage 2).

3.2.1.3 This EIA Scoping Report sets out the work completed to date. Stages 1 and 2 are complete and are reported in **sections 3.3** and **3.4**. For the Offshore Transmission Infrastructure and Onshore Transmission Infrastructure, progress made to date for Stage 3 is reported in **sections 3.5** and **3.7** respectively. For the Landfall, progress made in relation to Stages 3 and 4 is reported in **section 3.6**.

3.2.1.4 Work on future stages will be reported in the ES, with updates provided and consulted on, during the consultation and engagement process (see **section 5.10** of this EIA Scoping Report).

3.3. Identification of the Array Location (Stage 1)

3.3.1.1 In November 2017, Crown Estate Scotland announced a leasing round for commercial scale offshore wind energy projects within Scottish waters. The SMP-OWE provided the spatial framework for this leasing round through identification of areas of seabed that could be available for leasing.

3.3.1.2 The first ScotWind Leasing Round was launched by Crown Estate Scotland in June 2020. In the ScotWind Leasing Round, developers were able to apply for the rights to build offshore wind farms in Scottish waters within specified lease areas. In November 2020, the Applicant announced that they were in the process of preparing bids as part of the ScotWind Leasing Round.

3.3.1.3 The Applicant completed a site assessment to understand the risks and constraints associated with the 15 areas included in the ScotWind Leasing Round. Further work was undertaken by the Applicant to narrow the site selection further using the guidelines set out in the ScotWind Leasing documents (Crown Estate Scotland, 2021). Four sites were identified within three plan option areas. The Applicant proceeded to bid for one of the sites within the E1 plan option area, referred to as 'E1 East'.

3.3.1.4 In January 2022, the Applicant was awarded an Option to Lease Agreement for the E1 East boundary. This area was derived following constraints assessments that balanced technology, consenting and commercial feasibility factors.

3.3.1.5 Following this, the Applicant has undertaken further design refinement, taking into feedback from statutory consultees, work undertaken as part of the EIA and engineering/technical feasibility processes and site-specific surveys. This led to the Array Site Boundary defined in the application.

3.3.1.6 The location of the Ossian Array is shown on **Figure 1.3.1**. Details of the site selection process for the Ossian Array are set out in the Chapter 4: Site Selection and Consideration of Alternatives of the EIA Report accompanying the Array Application (Ossian OWFL, 2024).

3.4. Identification of the Points of Connection to the Onshore Grid (Stage 2)

3.4.1.1 With respect to the point of connection, NESO manages the supply of electricity within Great Britain and is responsible for assessing options to improve the coordination of offshore wind generation connections and transmission networks.

3.4.1.2 That work has focused on producing the Holistic Network Design (HND). Work on the HND started in 2021 and the HND 'Pathway to 2030' was published in 2022 by the National Grid Electricity System Operator (NGESO, the predecessor of NESO). This set out the approach to connecting 50 GW of offshore wind to the National Grid by 2030 (NGESO, 2022).

3.4.1.3 Building on this work, NGESO has more recently completed a second stage of work on the HND which reviewed the needs of the electricity network beyond 2030. The 'Beyond 2030' series of documents sets out the work undertaken and the recommendations of this process, which maps the way to a clean, secure and affordable energy future whilst delivering on the UK's climate change commitments and transitioning from more traditional forms of energy generation.

3.4.1.4 The report confirmed that the Ossian Array will deliver the energy generated by the wind farm to new substations connecting to the electricity transmission system in Lincolnshire in locations referred to as:

- Lincolnshire Connection Node (LCN); and
- Weston Marsh.

3.4.1.5 Both the Lincolnshire Connection Node and Weston Marsh will be new substations developed by National Grid Electricity Transmission (NGET) as part of the Grimsby to Walpole project (and do not therefore form part of the work proposed by Ossian OWFL). The new substations are referred to by NGET as the Lincolnshire Connection Substation (LCS) and Weston Marsh Substation.

3.4.1.6 The location and design of the Ossian Transmission Infrastructure, as described in **section 4** of this EIA Scoping Report, has been informed by a site selection process. The site selection process undertaken so far is described in **sections 3.5 to 3.7** below. This site selection process is ongoing and the next steps are outlined in **section 3.8**.

3.5. Offshore Transmission Infrastructure (Stage 3)

3.5.1 Offshore Export Cable Corridor

3.5.1.1 All elements of the Ossian Transmission Infrastructure seaward of MLWS will be located within the Offshore Scoping Boundary shown on **Figure 3.5.1**. It should be noted that the portion of the Offshore Scoping Boundary in Scottish waters encompasses the Array Site Boundary (within which the Array will be located), to allow for inclusion of the Offshore Export Cables stemming from the OSPs, as well as a section to the west of the Array Site Boundary to accommodate the Offshore Export Cable Corridor.

3.5.1.2 The Offshore Transmission Infrastructure will comprise Offshore Export Cables, located within an Offshore Export Cable Corridor. The Offshore Scoping Boundary represents the current stage of site selection and will be refined further to identify an Offshore Export Cable Corridor ahead of the applications for development consent and for a Marine License.

3.5.1.3 The identification of the Offshore Scoping Boundary was primarily dictated by the start and end points of the Offshore Export Cables, between the OSPs (within the Array) and the Landfall on the Lincolnshire coast (see **section 3.6**). It is noted that OSPs do not form part of the Offshore Transmission Infrastructure and have been assessed as part of the Array Application (Ossian OWFL, 2024).

3.5.1.4 The Applicant commenced early offshore optioneering work in 2023 to understand the key constraints and risks to offshore receptors from options routing from the Ossian Array to Lincolnshire. At this point, the Applicant was engaging with the NGESO as part of the ongoing HND review exercise to establish potential grid connections for Ossian.

3.5.1.5 A desktop review of constraints was undertaken for the following topics:

- benthic subtidal and intertidal ecology;
- fish and shellfish ecology;
- marine mammals;
- commercial fisheries;
- marine archaeology; and
- shipping and navigation.

3.5.1.6 The analysis focussed on these topics as they were considered to be most likely to pose constraints to cable installation, operation and maintenance and decommissioning. The constraints analysis covered the area between the Array Site Boundary and the Lincolnshire coastline up to Landfall. The following aspects were included within this constraints analysis to broadly understand the baseline and the key constraints:

- characterisation of seabed substrates;
- presence of and proximity to designated sites (including Special Areas of Conservation, MCZs, Marine Protected Areas, and Sites of Special Scientific Interest), Annex I and/or sensitive features, and OSPAR threatened and/or declining habitats;
- proximity to fish spawning and nursery grounds;
- presence of and proximity to oil and gas boreholes and infrastructure;

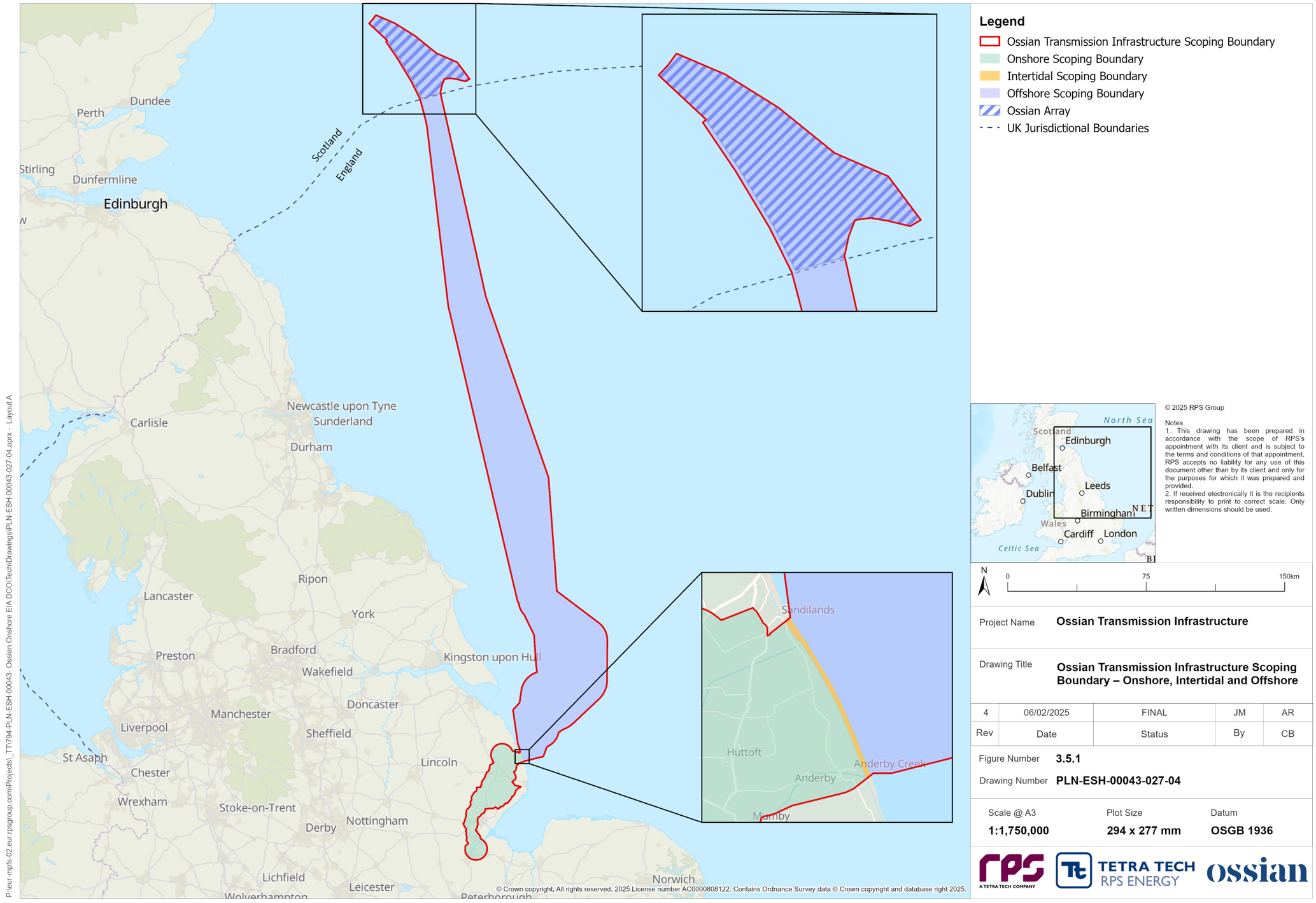


Figure 3.5.1:Ossian Transmission Infrastructure Scoping Boundary - Offshore, Intertidal and Onshore

- marine mammal species densities;
- commercial fisheries landings, effort, and gear types used;
- presence of fishing grounds;
- potential for submerged prehistoric archaeology;
- presence of and proximity to designated and live aviation and maritime wrecks;
- areas of potentially frequent commercial vessel activity and busy commercial fishing activity;
- presence of and proximity to navigational features (including anchorages, traffic separation schemes, and pilot boarding areas); and
- water depths in nearshore areas, in the context of navigable depth for commercial vessels.

3.5.1.7 Following this desktop exercise, as well as the announcement of the points of connection within the Beyond 2030 report (NGESO, 2024) and identification of the Preferred Landfall Search Area (see **section 3.6**), the Offshore Scoping Boundary shown on **Figure 3.5.1** was defined for the purposes of this EIA Scoping Report.

3.5.1.8 At this stage, it is not known where within the Array Site Boundary the OSPs will be located and, consequently, where the Offshore Export Cables will be located within the Array Site Boundary. This is subject to final design for the Ossian Array. Therefore, the entirety of the Array Site Boundary has been included as part of the Offshore Scoping Boundary. The Offshore Scoping Boundary adopted for the purposes of this EIA Scoping Report has considered that Offshore Export Cables may route to the west and south of the Array Site Boundary, depending on final location of OSPs. The Applicant has undertaken separate site selection and constraints analysis for the Ossian Array which has been detailed within the Array Application (Ossian OWFL, 2024) and includes consideration of the wind turbine generators and their mooring and anchoring systems, OSP topsides and foundations, inter-array cables and interconnector cables. The Applicant will undertake further constraints analysis within the Array Site Boundary in order to develop final wind turbine and OSP layouts and design prior to construction. Site-specific data will be used to refine the positioning of wind turbines and OSPs, and will ultimately inform the location of the Offshore Export Cables within the Array Site Boundary. The Offshore Export Cables will connect into final OSP locations within the Ossian Array once final design has been confirmed

3.5.1.9 As the site selection process continues, an Offshore Export Cable Corridor will be identified. Therefore, the draft DCO Order Limits and the application boundary for the Marine License will be narrower than the extent of the current Offshore Scoping Boundary. Further work during the EIA process will allow this to be refined to identify the routing of the Offshore Export Cables within the Offshore Export Cable Corridor. This refinement will also consider feedback received from stakeholders and consultees via the Scoping Opinions and dedicated consultation activities.

3.5.1.10 Details of the Offshore Export Cables can be found in **section 4** of this EIA Scoping Report. The project design parameters for the Offshore Export Cables, and the refined Offshore Export Cable Corridor(s) will be confirmed prior to submission of the ES and will take environmental, engineering and technical constraints into account, together with stakeholder feedback.

3.6. Landfall

3.6.1 Introduction

3.6.1.1 Work at the Landfall has included the following stages.

- Stage 3: Identification of broad study areas for the Landfall.
- Stage 4: Identification and assessment of Landfall Search Areas, including the following.
  - Stage 4.1: Identification of Landfall Search Areas – Long List.
  - Stage 4.2: Identification of Landfall Search Areas – Short List.
  - Stage 4.3: Identification of Preferred Landfall Search Area.

3.6.2 Identification of Broad Study Area for the Landfall (Stage 3)

3.6.2.1 When the points of connection to the onshore grid were emerging and then ultimately confirmed in the Beyond 2030 NGESO report, the Applicant undertook an assessment of options for the Landfall, taking into account both the points of connection and the work undertaken for the Offshore Transmission Infrastructure, including the offshore constraints analysis. This resulted in a broad study area for the Landfall on the Lincolnshire coast from south of Grimsby to The Wash. This is shown on **Figure 3.6.1**.

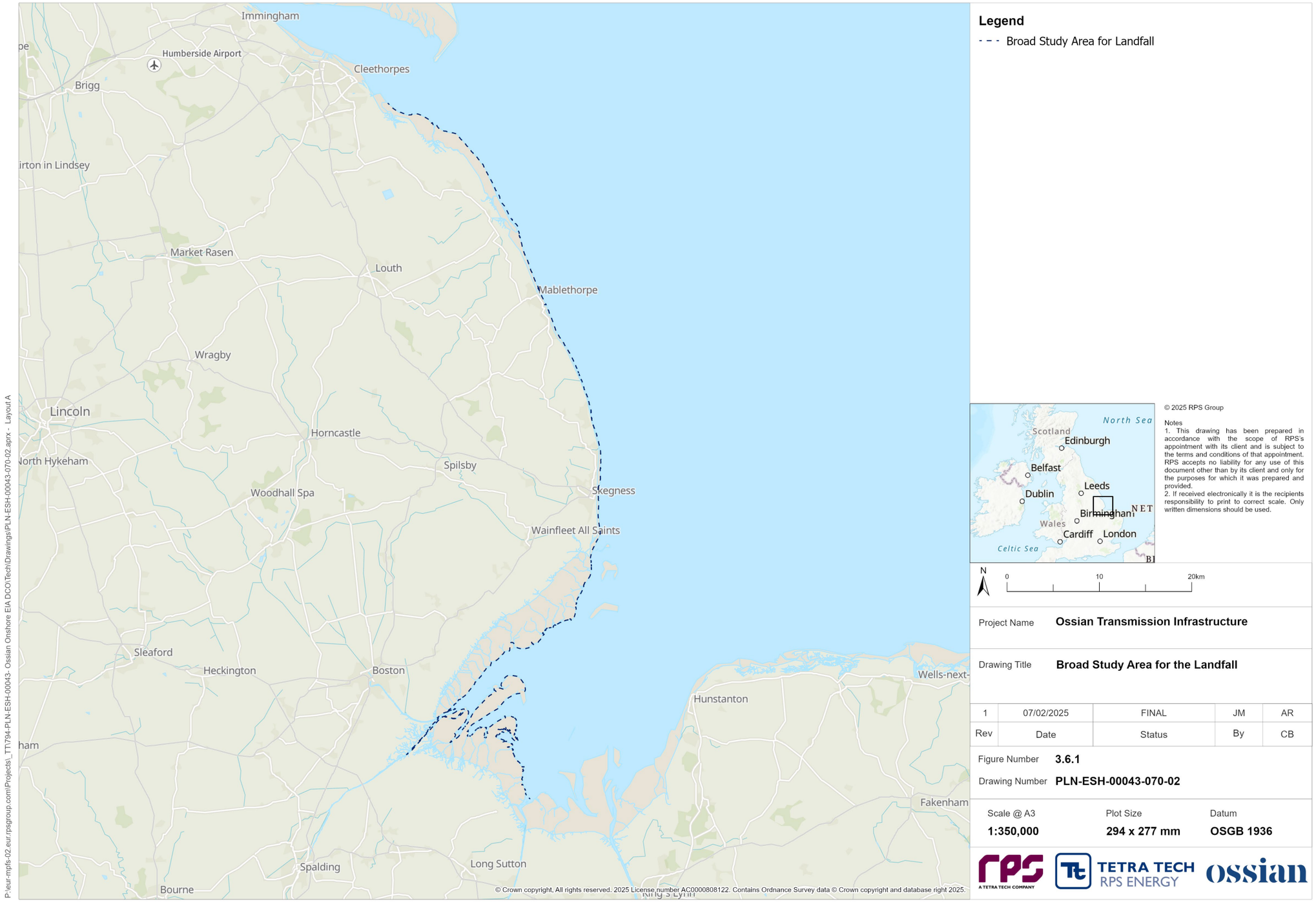
3.6.3 Identification of Landfall Search Areas – Long List (Stage 4.1)

3.6.3.1 Within the broad study area, six Landfall Search Areas, where the offshore cables could be brought onshore, were identified based on the following:

- consideration of identified offshore constraints for the Offshore Transmission Infrastructure;
- avoiding areas with substantial infrastructure or urban land use that would prevent making landfall and/or obstruct onward routing e.g. areas of housing, leisure development, coastal defences, other energy infrastructure;
- avoiding areas with a cliff height over 20 m and with a preference where cliff height was as low as possible; and
- avoiding internationally and nationally designated areas where possible.

3.6.3.2 Each of the Landfall Search Areas identified were much larger than the footprints required at the Landfall to allow flexibility to consider siting options at a later stage in the process when more information would be available. The six Landfall Search Areas are shown on **Figure 3.6.2**.

3.6.3.3 Further study was then undertaken of the environmental and technical constraints at the Landfall Search Areas, including the location of other existing and planned projects and engineering considerations, such as the method and feasibility of bringing the offshore cables onto land at each location.



Legend

- - - Broad Study Area for Landfall

Notes
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Project Name	**Ossian Transmission Infrastructure**
Drawing Title	**Broad Study Area for the Landfall**

Rev	Date	Status	By	
1	07/02/2025	FINAL	JM	AR

Figure Number **3.6.1**

Drawing Number **PLN-ESH-00043-070-02**

Scale @ A3	Plot Size	Datum
1:350,000	**294 x 277 mm**	**OSGB 1936**

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Figure 3.6.1:Broad Study Area for the Landfall

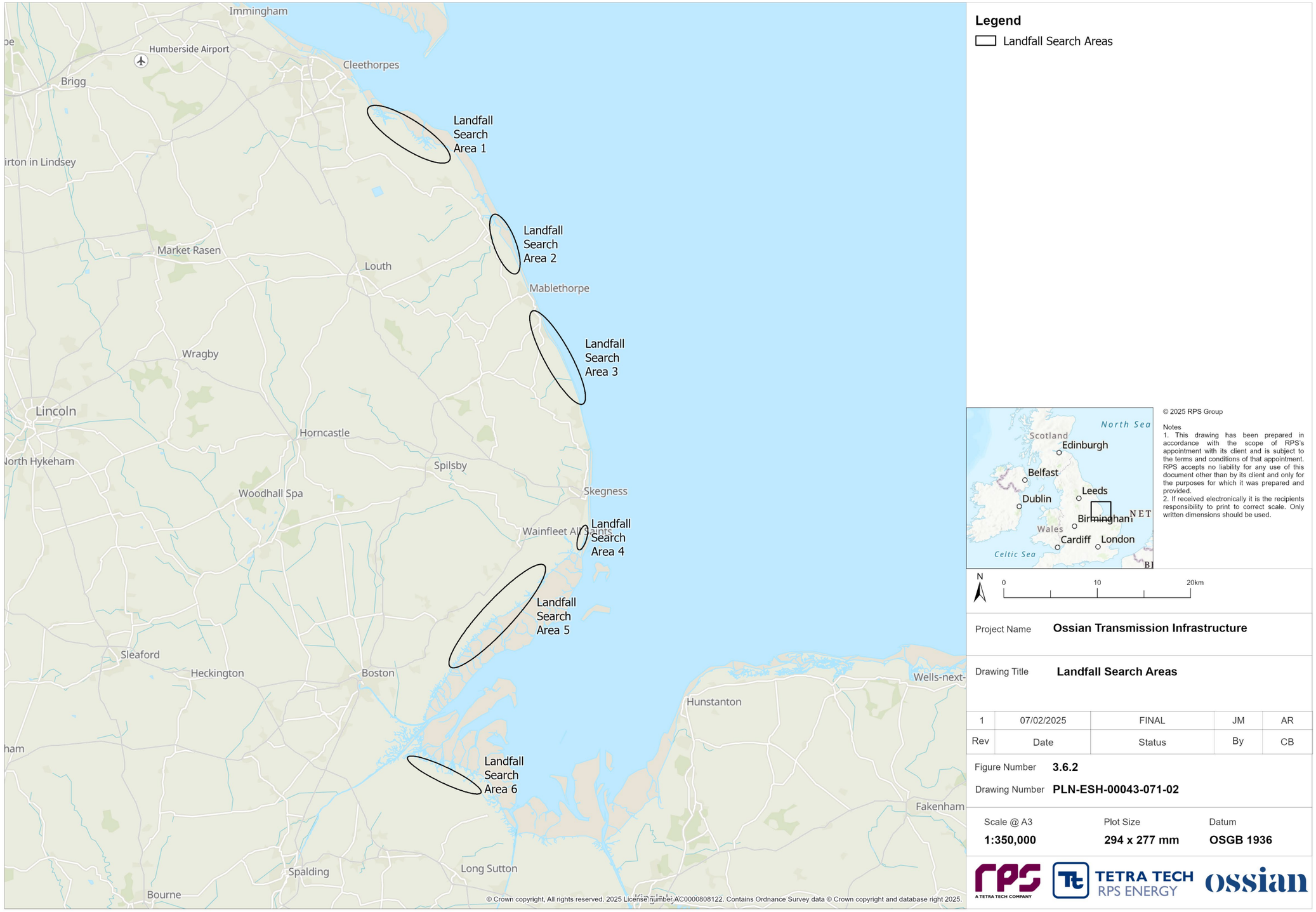


Figure 3.6.2:Landfall Search Areas

3.6.4 Identification of Landfall Search Areas – Short List (Stage 4.2)

3.6.4.1 The work described in **section 3.6.3** led to Landfall Search Areas 1, 4, 5 and 6 being discontinued.

3.6.4.2 Areas south of Skegness (Landfall Search Areas 4, 5 and 6) were ruled out because of the environmental constraints in and near to The Wash and South Norfolk Coast, including the following.

- Length of trenchless installation required would be material and may have technical limitations.
- The need to cross a range of international and national designated sites relating to Gibraltar Point, The Wash/Greater Wash and North Norfolk Coast, as well as Marine Protected Areas. These options would impact highly sensitive areas for birds and other protected species/habitats.
- Impact on recreational uses.

3.6.4.3 These constraints have been acknowledged in previous similar studies and the decision not to progress these options took into account experience from offshore wind farm projects that have considered cable routes through The Wash, such as Lincs and Race Bank (circa 2010 to 2015).

3.6.4.4 The Landfall Search Area in the Humber Estuary (Landfall Search Area 1) was also ruled out because this location had similar environmental and physical constraints and would involve much longer onshore routes. Constraints included the following.

- Length of trenchless installation required would be material and may have technical limitations. This option would also require a substantial length of Onshore Export Cable Corridor.
- The need to cross a range of national and international designations relating to the Humber Estuary.
- The Humber Estuary is a heavily trafficked shipping route. Landfall at this location may lead to significant disruption with potential shipping route closures.
- Presence of a settlement within the middle of search area.

3.6.4.5 Two areas were therefore identified as potentially feasible and were short listed for consideration:

- Landfall Search Area 2: Land around Theddlethorpe area; and
- Landfall Search Area 3: Land between Sandilands and Anderby Creek.

3.6.5 Identification of Preferred Landfall Search Area (Stage 4.3)

3.6.5.1 As set out in **section 3.6.4**, two Landfall Search Areas were shortlisted:

- Landfall Search Area 2: Land around Theddlethorpe area; and
- Landfall Search Area 3: Land between Sandilands and Anderby Creek.

3.6.5.2 As the Landfall(s) for cable routes to both LCS and Weston Marsh would be north of Skegness, a common shared Landfall location was sought for both routes because this would be more efficient to construct and would reduce the environmental impact of the project and impacts on the community.

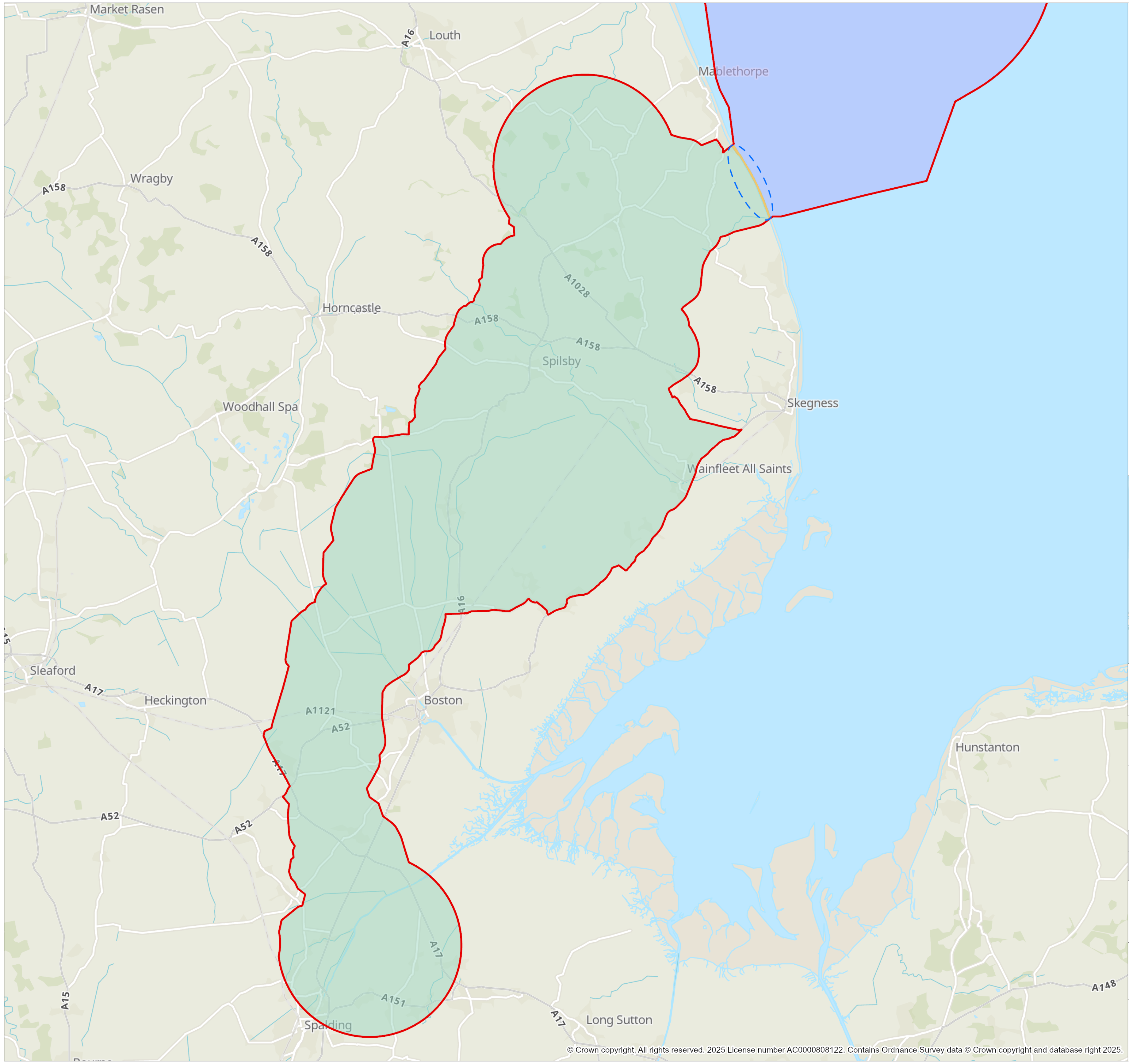
3.6.5.3 The work undertaken at this stage included consultation with NGET in relation to its work on the Eastern Green Link projects and with Natural England, on its previous experience and responses to similar developments in the region.

3.6.5.4 In November 2024, the Applicant ruled out further consideration of Landfall Area of Search Area 2 (Theddlethorpe). The reasons for this included the following.

- Theddlethorpe is a highly sensitive area comprising the following designations:
  - Special Protection Area (Greater Wash);
  - Special Area of Conservation (Saltfleetby-Theddlethorpe Dunes & Gibraltar Point);
  - Ramsar site (Humber Estuary);
  - Site of Special Scientific Interest;
  - National Nature Reserve (Lincolnshire Coronation Coast); and
  - priority habitats.
- Initial consultation with Natural England in September 2024 indicated that Theddlethorpe is not a preferred Landfall option for Natural England and that they would be likely to object to this option. This is on the basis that Theddlethorpe is highly designated and that the dunes are over 300 years old. Natural England noted that, in addition to construction, any geotechnical work would also be problematic and would require assessment under the Habitats Regulations.
- Engineering challenges around the feasibility of using trenchless techniques under the sand dunes in this location and achieving the length of trenchless installation (approximately 2 km) required to reach an adequate water depth offshore.

3.6.5.5 In contrast, a Landfall in the area between Sandilands and Anderby Creek avoids sensitive designations (including the dunes) at Theddlethorpe. It is consistent with the advice provided by Natural England and appears, from initial studies to be technically feasible and would allow opportunities for collaboration with other projects.

3.6.5.6 Therefore, work is now focussing on a refined area, referred to as the Preferred Landfall Search Area between Sandilands and Anderby Creek. This is the area within which it is anticipated that the Landfall would be located. This area is shown on **Figure 3.6.3**.



Legend

- Ossian Transmission Infrastructure Scoping Boundary
- Onshore Scoping Boundary
- Intertidal Scoping Boundary
- Offshore Scoping Boundary
- Preferred Landfall Search Area

Notes
1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
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N 0 10 20km

Project Name **Ossian Transmission Infrastructure**

Drawing Title **Preferred Landfall Search Area**

1	06/02/2025	FINAL	JM	AR
Rev	Date	Status	By	CB

Figure Number **3.6.3**

Drawing Number **PLN-ESH-00043-072-01**

Scale @ A3	Plot Size	Datum
1:250,000	**294 x 277 mm**	**OSGB 1936**

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Figure 3.6.3:Preferred Landfall Search Area

3.7. Onshore Transmission Infrastructure (Stage 3)

3.7.1 Introduction

3.7.1.1 All elements of the Ossian Transmission Infrastructure Scoping Boundary landward of MHWS will be located within the Onshore Scoping Boundary shown on **Figure 3.7.1**.

3.7.2 Onshore Converter Stations

3.7.2.1 Two Onshore Converter Station Search Areas have been identified, as shown on **Figure 3.7.1**. The locations of these areas have been informed by NGET's preferred siting zones for the new LCS and Weston Marsh Substations that will provide the points of connection for Ossian.

3.7.2.2 Up to three Onshore Converter Stations will be required as part of the Ossian Transmission Infrastructure (and will be located within the Onshore Converter Station Search Areas). One will be located in proximity to the LCS and up to two will be required in proximity to the Weston Marsh Substation.

3.7.2.3 At LCS, NGET has identified that two sites will be required for system resilience. The northernmost substation location is referred to as LCS A, while the southernmost is referred to as LCS B. In the early Ossian studies, Onshore Converter Station Search Areas were established around the preferred siting zones for both of NGETs LCS A and B.

3.7.2.4 In later studies and in defining the Onshore Scoping Boundary, the Applicant has focused on a search area around LCS A in East Lindsey District as the Applicant expects that to be the LCS location.

3.7.2.5 The Onshore Converter Station Search Areas identified on **Figure 3.7.1** comprise a 5 km radius around these two locations (LCS A and Weston Marsh). This radius is primarily driven by the likely feasibility with regard to length of connection between the Onshore Converter Stations proposed as part of the Ossian Transmission Infrastructure and the point of connection (the proposed National Grid substation). There are technical, efficiency and environmental benefits to siting the Onshore Converter Stations in proximity to the proposed NGET substations, such as:

- reduced cable length between the Onshore Converter Station and the point of connection, resulting in reduced disruption to communities and the environment; and
- improved technical efficiency.

3.7.2.6 Therefore, the siting objectives will favour locations in closer proximity, ideally within 2.5 km.

3.7.2.7 The selection of NGET's preferred siting zones has already taken into account established siting principles referred to in NPS EN-5, including the Horlock Rules, and the Onshore Converter Station Search Areas do not include any internationally and nationally designated areas of the highest amenity, cultural or scientific value. The site selection work currently ongoing will identify Onshore Converter Station siting options within these search areas. The following design principles will be applied, where these are practicable.

1. Avoid residential land (including gardens) where possible.
2. Avoid direct significant effects to internationally, nationally and locally designated areas.
3. Reduce significant effects to the special qualities of National Parks or other designated landscapes.
4. Avoid mature woodland and ancient woodland.
5. Avoid scheduled ancient monuments and listed buildings.
6. Avoid historic or active landfill sites.
7. Avoid areas that fall within areas of high flood risk.
8. Areas of local amenity value, important existing habitats and landscape features including ancient woodland, historic hedgerows, surface and groundwater sources and nature conservation areas should be protected as far as reasonably practicable.
9. Locations should take advantage of the screening provided by landform and existing features and the potential use of site layout and levels to keep intrusion into surrounding areas to a reasonably practicable minimum.
10. Options should keep the visual, noise and other environmental effects to a reasonably practicable minimum.
11. The space required should be limited to the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way.

3.7.2.8 Options selected are to be technically feasible and economically viable and to that end will be subject to a constructability review as part of the site selection process.

3.7.2.9 Current work is focussing on more detailed appraisal, including landscape appraisal, and the use of a GIS analytics mapping tool, informed by desk-based environmental and engineering constraints data. The environmental data being taken into account include those relating to:

- the historic environment;
- landscape and visual;
- noise and vibration;
- socio-economics;
- traffic and transport;
- forestry;
- water resources and flood risk;
- land use (including agricultural land classification); and
- ecology, ornithology and the requirements of the Habitats Regulations.

3.7.2.10 Following this initial GIS analysis, environmental and technical appraisals will be completed for potential Onshore Converter Station sites. This will include input from technical environmental specialists including the following topics:

- onshore ecology (including ornithology);
- landscape and visual;
- historic environment;
- hydrology and flood risk;
- soils;

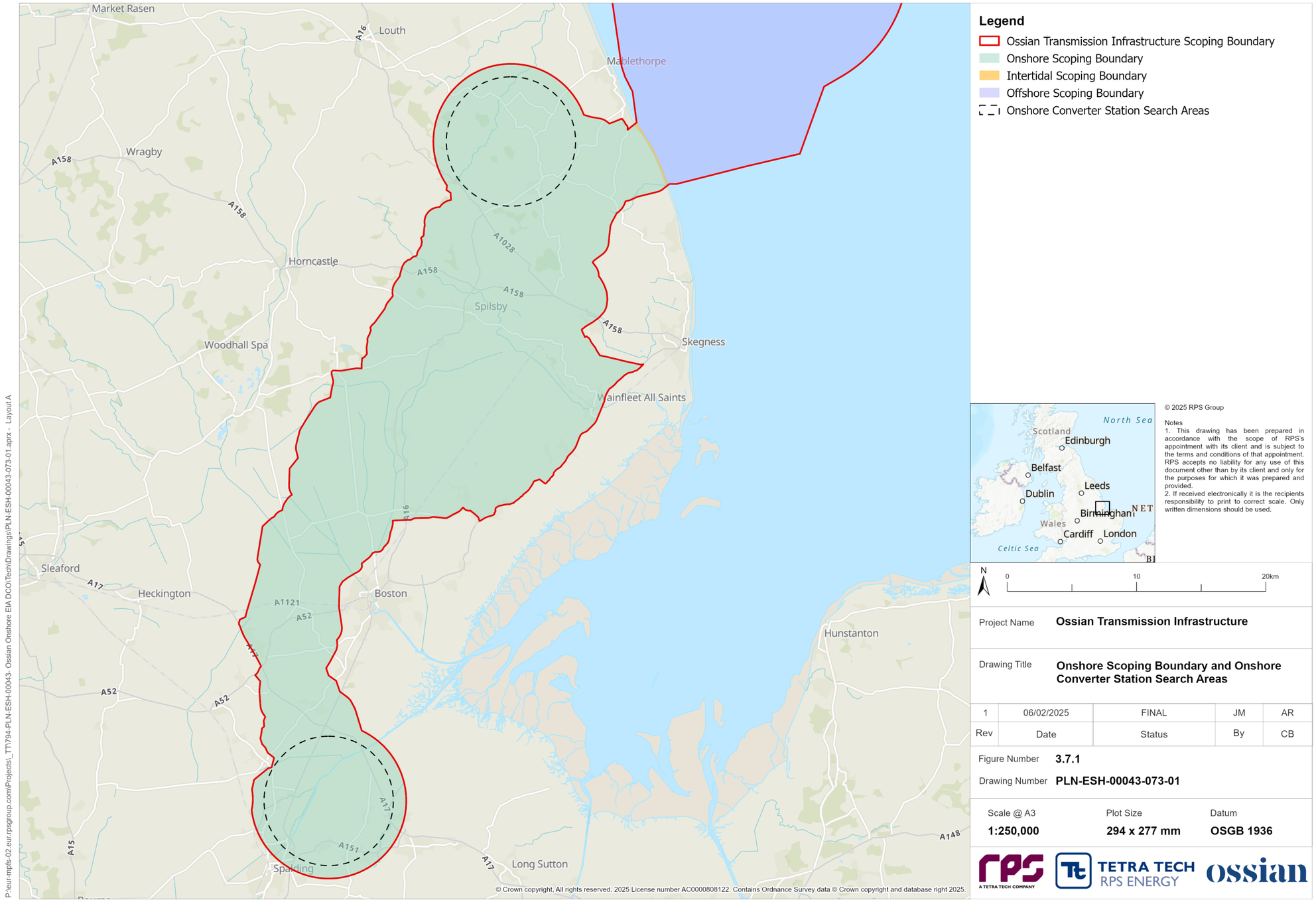

Figure 3.7.1:Onshore Scoping Boundary and Onshore Converter Station Search Areas

- geology and ground conditions;
- traffic and transport;
- air quality;
- noise;
- socio-economics.

3.7.2.11 The location of other projects in the local area will also be taken into account.

3.7.3 Onshore Export Cable Corridors

3.7.3.1 The starting point for consideration of potential Onshore Export Cable Corridors was identified by the need for a connection between:

- the Landfall and the Onshore Converter Stations; and
- the Onshore Converter Stations and the point of connection at the proposed NGET substations.

3.7.3.2 Work has been undertaken to identify environmentally sensitive areas and other projects in the area, including the existing routes of the Viking Link Interconnector and the Triton Knoll Electrical System and the proposed routes for the Grimsby to Walpole, Outer Dowsing and Eastern Green Link 3 and 4 projects.

3.7.3.3 The established approach to routing linear transmission infrastructure, known as the Horlock Rules, is to choose the most direct route but to avoid, if practicable, areas of high amenity and environmental value. These principles have determined the Onshore Scoping Boundary within which siting work will continue for potential cable routes.

3.7.3.4 The identification of potential Onshore Export Cable Corridors will adhere to the principles identified below where practicable:

1. routing should be kept as straight and as short as practicable – avoiding tight bends;
2. avoid residential land (including garden) where possible;
3. avoid direct significant effects to internationally and nationally designated areas;
4. avoid direct significant effects to mature woodland and ancient woodland;
5. avoid scheduled ancient monuments and listed buildings;
6. avoid historic or active landfill sites;
7. reduce the number and length of trenchless crossings;
8. reduce the number of crossings of assets (e.g. utilities);
9. reduce the number of road and rail crossings;
10. reduce the number of hedgerow crossings; and
11. reduce the number of watercourse crossings and number of ponds affected.

3.7.3.5 In addition to the principles above, all onshore cable route options will need to be technically and economically feasible and will be subject to a constructability review as part of the site selection process.

3.7.3.6 Work is currently being undertaken to identify potential Onshore Export Cable Corridors, which will avoid potential impacts that could lead to significant environmental effects where practicable, together with consideration of local communities and engineering feasibility. This includes taking into account the potential harm to the Lincolnshire Wolds National Landscape.

3.7.3.7 As a result of the work completed to date, the Applicant has ruled out further work on options to the east of Boston. Although this is potentially the shortest route, options to the east of Boston have been discontinued because of environmental constraints, ground conditions, limited options to access a crossing for The Haven (tidal river) and the constraints that will arise from the proposed location of the transmission infrastructure for Outer Dowsing. The environmental constraints included limited space between residential properties to the east of Boston, a landfill site and the Frampton Marsh nature reserve and RSPB reserve; the Havenside local wildlife site; and proximity to The Wash Special Protection Area, Ramsar Site and Site of Special Scientific Interest and The Wash & North Norfolk Coast Special Area of Conservation.

3.7.3.8 A GIS analytics mapping tool is being used to analyse environmental and engineering constraints data with the aim of avoiding a number of environmental constraints and designations at an early stage. Current work includes landscape appraisal and a review of constraints and input from technical environmental specialists including in relation to:

- onshore ecology (including ornithology);
- landscape and visual;
- historic environment;
- hydrology and flood risk;
- soils;
- land use (including agricultural land classification);
- geology and ground conditions;
- traffic and transport;
- air quality;
- noise; and
- socio-economics.

3.7.3.9 This work will also consider possible ‘pinch points’ that could affect the viability of cable routing options, including proximity to sensitive land uses, residential areas and crossing points for other projects. Based on this work, technical and environmental appraisals will be completed to identify preferred Onshore Export Cable Corridors to both LCS and Weston Marsh. These will be taken forward for further consideration and route refinement prior to the application.

3.8. Next Steps

3.8.1.1 The Ossian Transmission Infrastructure Scoping Boundary includes the areas within which the Offshore Export Cables, the Landfall, the Onshore Converter Stations and the Onshore Export Cables will be located. The site selection process is ongoing and will continue to inform the design of the Ossian Transmission Infrastructure and the EIA process up to the submission of the applications.

3.8.1.2 Next steps for site selection include non-statutory consultation, as described in **section 5.10.5**, data gathering and ecological and other environmental surveys to inform the process. Further detail about the site selection process will be provided in the Preliminary Environmental Information Report (PEIR). Beyond the PEIR, a site selection chapter will be provided as part of the ES that will accompany the applications for development consent and marine licence.

4. PROJECT DESCRIPTION

4.1. Introduction

4.1.1.1 This section provides a description of the Ossian Transmission Infrastructure, based on the information available at the time of writing. This has been used to inform the scoping process. It provides a description of the key components of the Ossian Transmission Infrastructure, including an overview of the approach to the construction, operation and maintenance and decommissioning phases.

4.1.1.2 As set out in **section 1.2**, the Ossian Transmission Infrastructure includes the following key components.

- Offshore Transmission Infrastructure which comprises the Offshore Export Cables from the OSPs (which form part of the Array Application) to Landfall. The Offshore Export Cables will be routed through both Scottish and English waters.
- Landfall - This is where the Offshore Export Cables are brought ashore and jointed to the Onshore Export Cables via the Transition Joint Bays. This term applies to the entire area between MLWS up to and including the Transition Joint Bays.
- Onshore Transmission Infrastructure, which includes the following.
  - HVDC Onshore Export Cables - Onshore HVDC cables from the Landfall to the Onshore Converter Stations.
  - Onshore Converter Stations - required to convert HVDC to HVAC such that the power can be supplied to the National Grid. The Onshore Converter Stations required include:
    - one converter station at the Lincolnshire Connection Node; and
    - up to two converter stations at Weston Marsh.
  - HVAC Onshore Export Cables - Onshore HVAC cables between the Onshore Converter Stations and the points of connection to the National Grid.

4.1.1.3 All of the above components would be located within the Ossian Transmission Infrastructure Scoping Boundary shown at **Figure 1.3.1**.

4.1.1.4 These components are illustrated in **Figure 4.3.1**.

4.2. Project Location

4.2.1.1 The purpose of the Ossian Transmission Infrastructure is to connect the Ossian Array to the National Grid electricity transmission network. As set out in **section 1.1**, NESO has confirmed that the Ossian Array will connect to the National Grid electricity transmission network in Lincolnshire via two connection points. As set out in **section 1.2**, these comprise National Grid substations that are proposed to be developed by NGET as part of the Grimsby to Walpole project (and do not therefore form part of the work proposed by Ossian OWFL).

4.2.1.2 **Figure 1.3.1** shows the locations of the Ossian Array and the Ossian Transmission Infrastructure.

4.2.1.3 The Offshore Transmission Infrastructure includes works in both Scottish and English waters, referred to as the SOfTI and the EOfTI (see **section 1.3**). The Landfall and Onshore Transmission Infrastructure include works located within the administrative areas of East Lindsey District Council, Boston Borough Council and South Holland District Council (who work together as the South and East Lincolnshire Councils Partnership) and Lincolnshire County Council.

4.3. Site Selection, Design and the Ossian Transmission Infrastructure Scoping Boundary

4.3.1.1 At this time, and as set out **section 3**, Ossian OWFL is undertaking site selection. This process of site selection, route refinement and design will continue ahead of submission of the application for development consent and the application for a Marine License, with detailed design continuing post-consent. This will be informed by the findings of the EIA process, including site surveys, and by consultation and engagement with technical and community stakeholders.

4.3.1.2 The Ossian Transmission Infrastructure will be located within the Ossian Transmission Infrastructure Scoping Boundary shown on **Figure 1.3.1**. This is the area within which site selection work is being undertaken and covers a larger area than will be required for the applications, once final options have been selected and refined.

4.3.1.3 Within the Ossian Transmission Infrastructure Scoping Boundary, the following areas have been identified as shown on **Figure 3.5.1**.

- Offshore Scoping Boundary (in Scottish offshore and English waters). All elements of the Ossian Transmission Infrastructure Scoping Boundary seaward of MLWS. It should be noted that the portion of the Offshore Scoping Boundary in Scottish waters encompasses the Array Site Boundary (within which the Ossian Array will be located), plus an additional corridor to the west of the Ossian Array. The Offshore Export Cables will terminate at the OSPs, which are located within the Array Site Boundary. The final locations of the OSPs are yet to be determined.
- Intertidal Scoping Boundary (in English territorial waters and on English land). All elements of the Ossian Transmission Infrastructure Scoping Boundary between MLWS and MHWS.
- Onshore Scoping Boundary. All elements of the Ossian Transmission Infrastructure Scoping Boundary landward of MHWS.

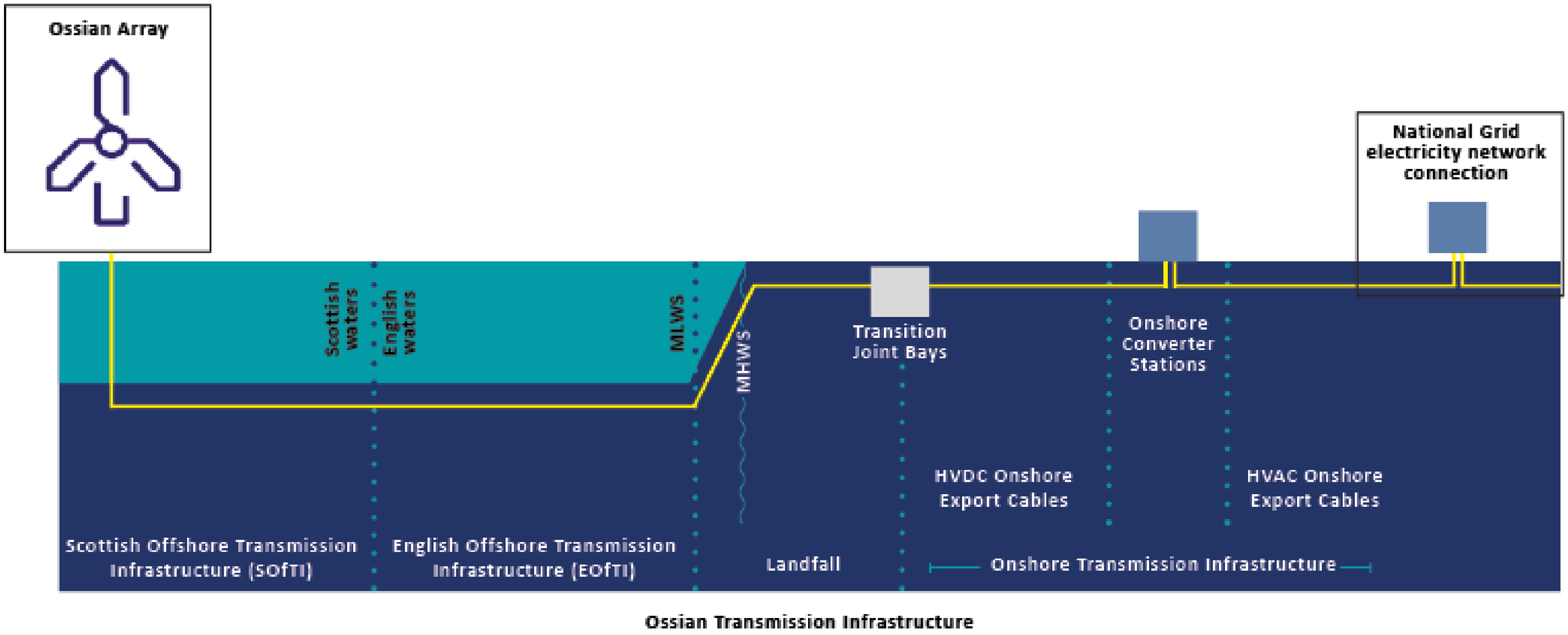

Figure 4.3.1: Key Components of the Ossian Transmission Infrastructure (Indicative)

4.4. Project Parameters

4.4.1.1 This section of the EIA Scoping Report sets out details of the anticipated design parameters for the Ossian Transmission Infrastructure. These parameters are preliminary and will be developed and refined further ahead of submission of the applications for development consent (for the Onshore Transmission Infrastructure, Landfall and EOfTI) and Marine Licence for works in Scottish offshore waters (the SOfTI). However, they are based on current knowledge and include sufficient information to allow identification of the likely significant effects of the project for the purposes of scoping. The topic sections of this EIA Scoping Report have taken the parameters identified in this section into account, to allow identification of the potential impacts and likely significant effects that should be included and those that can reasonably be excluded from the EIA process.

4.4.1.2 It is likely that some flexibility in terms of design will still be required at the time of submission. As set out in **section 5.4**, this is necessary and typical for applications of this type and scale. Any required design flexibility will be presented in the form of a Project Design Envelope (PDE) within the ES. Details of the approach to the identification of design parameters and the methodology for assessment are set out in **section 5.4.5** of this EIA Scoping Report.

4.5. Offshore Components

4.5.1 Introduction

4.5.1.1 The Offshore Transmission Infrastructure includes works in both Scottish and English waters, referred to as the SOfTI and the EOfTI (see **section 1.4**). Collectively, these areas are referred to as the Offshore Transmission Infrastructure. The Offshore Transmission Infrastructure will be located within the Offshore Scoping Boundary, shown on **Figure 3.5.1**.

4.5.2 Offshore Export Cables

4.5.2.1 This section describes the PDE for the Offshore Export Cables, including sections of the Offshore Export Cables that are to be located within the Array Site Boundary (but do not form part of the development assessed as part of the Array Application).

4.5.2.2 The Offshore Export Cables will transfer power from the OSPs located within the Array Site Boundary to the Landfall. The OSPs are included and assessed within the Array Application (Ossian OWFL, 2024) and are not therefore included within the project description for the Ossian Transmission Infrastructure.

Offshore Export Cables: Construction

4.5.2.3 The Offshore Export Cables will be HVDC. Up to six Offshore Export Cables are proposed to be installed within the Offshore Scoping Boundary with a maximum total length of 3,053 km, of which a maximum of 270 km will be installed in Scottish waters. This refers to the maximum lengths of all six Offshore Export Cables ‘unbundled’ each laid in a single trench. The Offshore Export Cables may be ‘bundled’ to reduce the number of cable trenches required, from six to three. This requires bundling cables in pairs with a positive pole and negative pole per HVDC circuit, resulting in three HVDC circuits in total. However, for the purpose of scoping it should be assumed that one trench will be required for each export cable and so six in total. The Offshore Export Cables will be installed in a trench up to 3 m wide for each cable and buried to a target burial depth between 1 m and 3 m (subject to Cable Burial Risk Assessment (CBRA)). In areas where the minimum burial depth cannot be met, external cable protection may be used, such as concrete mattresses, rock bags, rock, cast iron shells and polyurethane/polyethylene sleeving. The final solution(s) chosen at final design stage (post-consent) will be dependent upon seabed conditions and any potential interactions with human activities that may occur within the vicinity of the Offshore Scoping Boundary. Seabed preparation may be required prior to cable installation, with activities such as boulder clearance, sandwave clearance, cable crossing preparation, pre-construction geophysical surveys, disused/out of service cable removal currently under consideration.

4.5.2.4 A cable lay vessel will be used for installation (laying) of the Offshore Export Cables. Offshore Export Cables can be surface laid prior to cable burial or installation of external cable protection post lay, or cable lay and cable burial can be performed simultaneously.

4.5.2.5 There are several options which may be used to bury the Offshore Export Cables. Equipment that may be used includes the following.

- Mass flow excavators, which inject water at high pressure into the sediment surrounding the cable.
- Jet trenchers, which use water jets to fluidise the seabed which allows the cable to sink into the seabed under its own weight.
- Mechanical trenchers, usually mounted on tracked vehicles, which use chain cutters or wheeled arms with teeth or chisels to cut a trench across the seabed.
- Displacement plough, which creates a V shaped trench into which the cable can be laid.
- Non-displacement plough, which simultaneously lifts a share of seabed whilst depressing the cable into the bottom of the trench. As the plough progresses, the share of the seabed is replaced on top of the cable.
- Backhoe excavator, which removes material from the seabed to create a trench into which the cable can be laid and then deposits or backfills the excavated material in to the trench created.

4.5.2.6 One or more of these methods may be used for the installation and burial of the Offshore Export Cables.

4.5.2.7 The ES will present the location of the Offshore Export Cable Corridor, following a process of route refinement. The ES will also describe the proposed installation methodology for the Offshore Export Cables and the potential external cable protection measures to be utilised. These parameters will be further refined and finalised at the final design stage (post-consent) and will be informed by the results of environmental and pre-construction site investigation surveys.

Design Parameters

4.5.2.8 The design parameters for the Offshore Export Cables are presented in **Table 4.5.1**.

Table 4.5.1: Indicative Parameters for Offshore Export Cables (Ossian Transmission Infrastructure Total Parameters)

Parameter	Project Design Envelope
Transmission type	HVDC
Maximum number of Offshore Export Cables	6
Maximum number of fibre optic cables	6
Maximum number of cable circuits	3
Maximum external cable diameter (mm)	300
Maximum total length of offshore cable route (km)	509
Maximum total length of Offshore Export Cables (km) (unbundled)	3,053
Maximum total length of Offshore Export Cables (km) (bundled)	1,527
Seabed preparation activities[3]	Pre-lay grapnel run, boulder clearance, sandwave clearance, cable crossing preparation, pre-construction geophysical surveys, disused/out of service cable removal.
Burial technique	Displacement cable plough, non-displacement cable plough, jet trencher, mass flow excavator, mechanical cutter, backhoe.
Target burial depth (m)	1 (subject to CBRA)
Target burial depth in high-risk areas (e.g. shipping lanes) (m)	3 (subject to CBRA)
External cable protection material type (if required)	Concrete mattresses, rock bags, rock, cast iron shells, polyurethane/ polyethylene sleeving
Maximum cable trench width (m)	3
Maximum width of seabed disturbed by cable installation (per cable) (m)	20
Maximum area of seabed disturbed (km^2) (in total for all six cables unbundled)	62

Indicative Parameters for the EOfTI (Applicable to the DCO)

4.5.2.9 For clarity, **Table 4.5.2** sets out the parameters as they apply to the Offshore Export Cables in English Waters (the EOfTI). The EOfTI would be subject to the DCO. The parameters shown for the EOfTI are not additional to those shown in **Table 4.5.1**.

Table 4.5.2: Indicative Parameters for the EOfTI (Applicable to the DCO)

Parameter	Project Design Envelope
Transmission type	HVDC
Maximum number of Offshore Export Cables	6
Maximum number of fibre optic cables	6
Maximum number of cable circuits	3
Maximum external cable diameter (mm)	300
Maximum total length of offshore cable route in English waters (km)	464
Maximum length of Offshore Export Cables in English waters (km) (unbundled)	2,783
Maximum length of Offshore Export Cables in English waters (km) (bundled)	1,392
Seabed preparation activities[4]	Pre-lay grapnel run, boulder clearance, sandwave clearance, cable crossing preparation, pre-construction geophysical surveys, disused/out of service cable removal.
Burial technique	Displacement cable plough, non-displacement cable plough, jet trencher, mass flow excavator, mechanical cutter, backhoe.
Target burial depth (m)	1 (subject to CBRA)
Target burial depth in high-risk areas (e.g. shipping lanes) (m)	3 (subject to CBRA)

[3] Subject to engineering confirmation after review of survey data and CBRA.

[4] Subject to engineering confirmation after review of survey data and CBRA.

Parameter	Project Design Envelope
External cable protection material type (if required)	Concrete mattresses, rock bags, rock, cast iron shells, polyurethane/ polyethylene sleeving
Maximum cable trench width (m)	3
Maximum width of seabed disturbed by cable installation (per cable) (m)	20
Maximum area of seabed disturbed (km^2) (in English waters unbundled)	55.7

Indicative Parameters for the SOfTI (Applicable to Scottish Marine Licensing)

4.5.2.10 For clarity, **Table 4.5.3** sets out the parameters as they apply to the Offshore Export Cables in Scottish Waters (the SOfTI). The SOfTI would be subject to Scottish Marine Licensing. The parameters shown for the SOfTI are not additional to those shown in **Table 4.5.1**.

Table 4.5.3: Indicative Parameters for the SOfTI (Applicable to Scottish Marine Licensing)

Parameter	Project Design Envelope
Transmission type	HVDC
Maximum number of Offshore Export Cables	6
Maximum number of fibre optic cables	6
Maximum number of cable circuits	3
Maximum external cable diameter (mm)	300
Maximum length of offshore cable route in Scottish waters (km)	45
Maximum length of Offshore Export Cables in Scottish waters (km) (unbundled)	270
Maximum length of Offshore Export Cables in Scottish waters (km) (bundled)	135
Seabed preparation activities[5]	Pre-lay grapnel run, boulder clearance, sandwave clearance, cable crossing preparation, pre-construction geophysical surveys, disused/out of service cable removal.
Burial technique	Displacement cable plough, non-displacement cable plough, jet trencher, mass flow excavator, mechanical cutter, backhoe.
Target burial depth (m)	1 (subject to CBRA)
Target burial depth in high-risk areas (e.g. shipping lanes) (m)	3 (subject to CBRA)
External cable protection material type (if required)	Concrete mattresses, rock bags, rock, cast iron shells, polyurethane/ polyethylene sleeving
Maximum cable trench width (m)	3
Maximum width of seabed disturbed by cable installation (per cable) (m)	20
Maximum area of seabed disturbed (km^2) (in Scottish waters unbundled)	5.4

[5] Subject to engineering confirmation after review of survey data and CBRA.

4.6. Landfall

4.6.1 Introduction

4.6.1.1 The Landfall is the area where the Offshore Export Cables are brought ashore and then jointed to the Onshore Export Cables via the Transition Joint Bays. It would include all works from MLWS to the Transition Joint Bays.

4.6.1.2 The exact landfall location for the Landfall has not yet been determined. This will be confirmed at a later stage informed by the outputs from technical and design studies. However, at this stage a Preferred Landfall Search Area has been identified, within which the Landfall will be located (see **Figure 3.7.1**). The Preferred Landfall Search Area includes the part of the coastline between the southern edge of Sandilands and Anderby Creek, south of Mablethorpe.

4.6.2 Landfall Construction

4.6.2.1 The exact method and approach to construction is subject to further detailed assessment and design and will be confirmed at a later stage following investigation of the ground conditions.

4.6.2.2 It is likely that installation of the Offshore Export Cables from MLWS to the Transition Joint Bays would be by trenchless technologies, such as Horizontal Directional Drilling (HDD) or direct pipe. Trenchless techniques usually involve

installation of pipes or ducts between two points without open cut trenching, with cables pulled through the installed pipes/ducts.

4.6.2.3 The Transition Joint Bays are below ground structures within which the Offshore Export Cables would be jointed to the Onshore Export Cables. Construction of the Transition Joint Bays and installation of the cables would require temporary construction compounds. The construction compounds and the cable installation works would require access for construction vehicles, which may include access to the beach, depending on the location and proposed installation method for the Landfall.

4.6.2.4 All construction working areas, including any areas where trench excavation is required, would be reinstated to their previous use on completion of construction. Once construction is completed, a single ground level inspection cover would be required at each Transition Joint Bay location.

4.6.3 Design Parameters

4.6.3.1 **Table 4.6.1** summarises the design parameters for the Landfall, as far as they are known at this stage.

Table 4.6.1: Landfall Parameters

Parameter	Project Design Envelope
Preferred Landfall Search Area	Coastline between Sandilands and Anderby Creek, East Lindsey.
Offshore cable type (between MLWS and Transition Joint Bays)	HVDC
Cable installation technique(s)	Likely to include trenchless techniques, such as HDD (which may require some excavation of the seabed). Some areas of trenched excavation in Landfall working area may be required.
Number of Transition Joint Bays	Six (one per Offshore Export Cable). Transition Joint Bays are below ground concrete structures.
Permanent above ground infrastructure	Ground level inspection covers – one per Transition Joint Bay.
Temporary construction working area (including construction compounds)	150 m x 150 m
Permanent above ground infrastructure	Ground level inspection covers only

4.7. Onshore Components

4.7.1 Introduction

4.7.1.1 The Onshore Transmission Infrastructure will be located within the Onshore Scoping Boundary, shown on **Figure 3.5.1**.

4.7.2 Onshore Converter Stations

Search Areas

4.7.2.1 As set out in **section 3.4** of this EIA Scoping Report, as part of its Holistic Network Design process, National Grid ESO (now NESO) published its 'Beyond 2030' report (NGESO, 2024). This confirmed that the electricity from the Ossian Array would connect at the following broad locations:

- the location that was previously referred to as Lincolnshire Connection Node (LCN) and subsequently referred to as Lincolnshire Connection Substation (LCS); and
- Weston Marsh.

4.7.2.2 Both the Lincolnshire Connection and Weston Marsh Substations are proposed to be developed by National Grid Electricity Transmission (NGET) as part of the Grimsby to Walpole project (and do not therefore form part of the work proposed by Ossian OWFL).

4.7.2.3 As part of the Ossian Transmission Infrastructure, new Onshore Converter Stations would be required close to the National Grid substations to transform the electricity supplied by the Ossian Array from HVDC to HVAC for connection to the National Grid electricity transmission system. The Onshore Converter Stations required as part of the Ossian Transmission Infrastructure include the following.

- One Onshore Converter Station in the vicinity of one of the two new Lincolnshire Connection Substations (referred to as LCS A) proposed as part of the Grimsby to Walpole project.
- Up to two Weston Marsh Onshore Converter Stations in the vicinity of the new Weston Marsh Substation proposed as part of the Grimsby to Walpole project.

4.7.2.4 At Weston Marsh, the two Onshore Converter Stations may be co-located or separately located.

4.7.2.5 It is desirable and efficient to locate the Onshore Converter Stations close to the National Grid substations (the precise locations of these are yet to be confirmed by National Grid) as this potentially reduces the amount of equipment required and the length of the HVAC Onshore Export Cable

4.7.2.6 Two Onshore Converter Station Search Areas (one for each of the above areas) have been identified within the Onshore Scoping Boundary. The search areas represent the area within which further site selection work will be undertaken. The search areas represent a 5 km radius from each of the following substation areas proposed by NGET as part of the Grimsby to Walpole project:

- LCS A Substation; and
- Weston Marsh Substation.

4.7.2.7 These are shown on **Figure 3.7.1**.

Onshore Converter Stations – Permanent Infrastructure

4.7.2.8 Onshore Converter Stations are typically likely to require the following components:

- control building;
- AC switch yard;
- transformer and reactor area;
- converter and valve hall;
- cooling area comprising cooling fans/cooling system;
- storage building/area;
- lightning rods; and
- back-up diesel generator.

4.7.2.9 The permanent Onshore Converter Station footprints would include the built elements, as well as operational drainage features (such as attenuation ponds and/or swales) and landscape/biodiversity planting.

4.7.2.10 A permanent access from the highway and car parking area would also be required.

4.7.2.11 Operational lighting would be designed to avoid illumination of areas beyond the operational site. It is anticipated that operational outdoor lighting at the boundary of the Onshore Converter Station sites would be restricted to motion-activated security lighting.

Onshore Converter Stations - Construction

4.7.2.12 Construction of the Onshore Converter Stations is likely to require the following activities:

- pre-construction surveys;
- site clearance and biodiversity/early planting works;
- diversion of utilities, if required;
- site mobilisation;
- establishment of temporary access and construction compound(s);
- Installation of boundary fencing;
- delivery of welfare and plant;
- drainage;
- earthworks;
- landscaping;
- any permanent access/highway improvements;
- installation of foundations and substructure;
- erection of buildings and installation of equipment;
- fitting out;
- demobilisation; and
- commissioning.

4.7.2.13 Construction of the Onshore Converter Stations would require earthworks (cut and fill), which may result in permanent alterations in land height in the vicinity of the sites.

4.7.2.14 Temporary construction compounds and temporary construction access would also be required at each Onshore Converter Station site. Temporary access routes may form the basis of permanent access routes for the Onshore Converter Stations. This will be identified during the site selection process. All land required on a temporary basis for construction only would be restored to its former use on completion of the construction works.

4.7.2.15 Task-specific lighting would be used to reduce the illumination of areas beyond the construction areas.

Design Parameters

4.7.2.16 **Table 4.7.1** summarises the design parameters for the Onshore Converter Stations, as far as they are known at this stage.

Table 4.7.1: Onshore Converter Station Parameters

Parameter	Project Design Envelope
Transmission type	HVDC to HVAC
LCS A Onshore Converter Station	
Number of Onshore Converter Stations	1
Maximum distance from National Grid Lincolnshire Connection Substation (km)	5
Indicative permanent footprint (including landscape planting, drainage) (hectares)	7.5
Maximum building height (m)	26
Maximum height of lightning protection (m)	33
Temporary construction working area (in addition to permanent footprint (hectares)	2.5
Weston Marsh Onshore Converter Stations	
Number of Onshore Converter Stations	2
Maximum distance from National Grid Weston Marsh Substation (km)	5
Indicative permanent footprint (including landscape planting, drainage) (hectares)	15 (2 x 7.5)
Maximum building height (m)	26
Maximum height of lightning protection (m)	33
Temporary construction working area (in addition to permanent footprint (hectares)	5 (2 x 2.5)

4.7.3 Onshore Export Cables

4.7.3.1 Two types of Onshore Export Cables would be required as part of the Onshore Transmission infrastructure. These are:

- HVDC Onshore Export Cables between the Landfall and the Onshore Converter Stations; and
- HVAC Onshore Export Cables between the Onshore Converter Stations and the point of connection at the National Grid substations.

Onshore Export Cable Installation

4.7.3.2 All Onshore Export Cables would be installed below ground. No overhead lines are proposed. Cables would generally be installed by open trenching. Where the cable route would need to cross features, such as environmentally sensitive areas, trenchless techniques will be considered. Such techniques may include HDD, direct pipe, micro-tunnelling or equivalent techniques.

4.7.3.3 Cables would be installed in sections, which would be jointed together at underground joint bays typically every 500 to 1000 m. In addition, link boxes would be required to house connections between the cable shielding, joints for fibre optic cables and other auxiliary equipment subject to detailed design.

4.7.3.4 Cable installation would require working compounds along the HVDC and HVAC Onshore Export Cable Corridors. In addition, temporary accesses for construction traffic are likely to be required. An indicative cross section for a typical cable corridor during construction is shown in **Figure 4.7.1**.

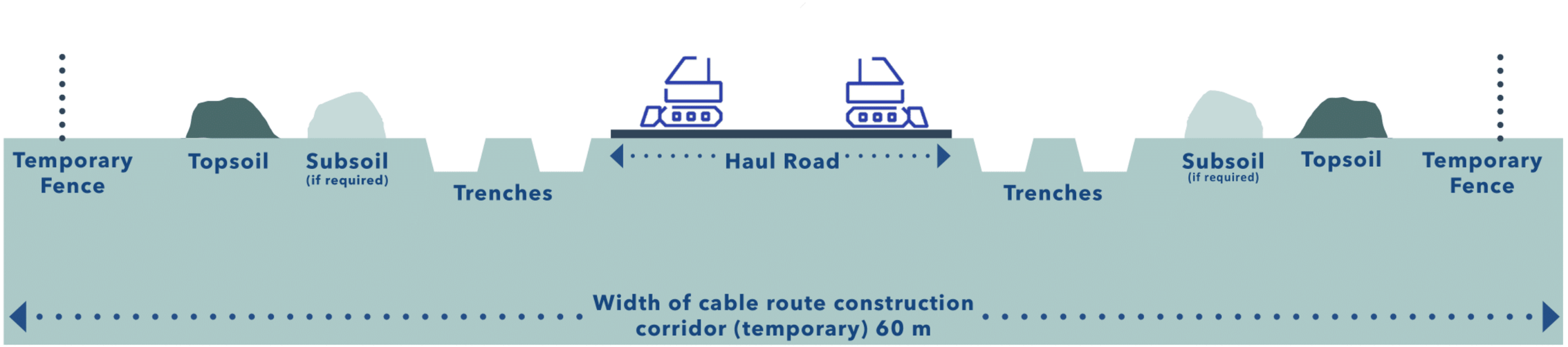

Figure 4.7.1:Indicative Cable Route Cross Section

4.7.3.5 All construction working areas, including any areas where trench excavation is required, would be reinstated to their previous use on completion of construction.

HVDC Onshore Export Cables

4.7.3.6 As set out in **section 4.5**, the Offshore Export Cables to Landfall would be HVDC. HVDC Onshore Export Cables are proposed to conduct the electricity from the Transition Joint Bays at Landfall to the proposed Onshore Converter Stations.

4.7.3.7 The following HVDC Onshore Export Cable Corridors would be required, within which the HVDC Onshore Export Cables would be located.

- An HVDC Onshore Export Cable Corridor between the Landfall and the proposed LCS A Onshore Converter Station.
- HVDC Onshore Export Cable Corridor(s) between the Landfall and the proposed Weston Marsh Onshore Converter Station(s).

4.7.3.8 All of the above would be located within the Onshore Scoping Boundary. The site selection process will identify the alignment for each cable corridor, taking into account environmental, community, engineering and landowner constraints.

4.7.3.9 **Table 4.7.2** summarises the design parameters for the HVDC Onshore Export Cables, as far as they are known at this stage.

Table 4.7.2: HVDC Onshore Export Cable Route Parameters

Parameter	Project Design Envelope
Onshore cable type	HVDC
Permanent above ground infrastructure	Ground level inspection covers located approximately every 500 m to 1000 m.
LCS	
Indicative maximum length of cable route (km)	17
Number of cables required	2
Maximum number of trenches required	2
Indicative trench depth (m)	2
Approximate width of construction corridor (m)	40
Width of permanent corridor (including the area required to be retained for easement and future access/maintenance) (m)	20
Weston Marsh	
Indicative maximum length of cable route (km)	80
Number of cables required	4
Maximum number of trenches required	4
Indicative trench depth (m)	2
Approximate width of construction corridor (m)	60
Width of permanent corridor (including the area required to be retained for easement and future access/maintenance) (m)	30

4.7.3.10 In addition to the above, fibre-optic cables are likely to be required for communications and temperature sensing. This may include up to one communication and one temperature sensing fibre-optic cable per trench.

Onshore HVAC Cables

4.7.3.11 HVAC Onshore Export Cables are proposed to conduct the electricity from the Onshore Converter Stations to the point of connection to the National Grid. The following HVAC Onshore Export Cable Corridors would be required, within which the HVAC Onshore Export Cables would be located.

- An HVAC Onshore Export Cable Corridor between the proposed LCS A Onshore Converter Station and the National Grid LCS A.
- HVAC Onshore Export Cable Corridor(s) between the proposed Weston Marsh Onshore Converter Station(s) and the National Grid Weston Marsh Substation.

4.7.3.12 All of the above would be located within the Onshore Scoping Boundary. The site selection process will identify the alignment for each cable corridor, taking into account environmental, community, engineering and landowner constraints.

4.7.3.13 **Table 4.7.3** summarises the design parameters for the HVAC Onshore Export Cables, as far as they are known at this stage.

Table 4.7.3: HVAC Onshore Export Cable Route Parameters

Parameter	Project Design Envelope
Onshore cable type	HVAC
Permanent above ground infrastructure	Ground level inspection covers only located approximately every 500 m to 1000 m.
LCS	
Indicative maximum length of cable route (km)	5
Number of cables required	6
Maximum number of trenches required	2
Indicative trench depth (m)	2.5
Width of construction corridor (m)	40
Width of permanent corridor (including the area required to be retained for easement and future access/maintenance) (m)	20
Weston Marsh	
Indicative maximum length of cable route (km)	5
Number of cables required	12
Maximum Number of trenches required	4
Indicative trench depth (m)	2.5
Width of construction corridor (m)	60
Width of permanent corridor (including the area required to be retained for easement and future access/maintenance) (m)	30

4.7.3.14 As for the HVDC cables, in addition to the above, fibre-optic cables are likely to be required for communications and temperature sensing. This may include up to one communication and one temperature sensing fibre-optic cable per trench.

4.8. Programme and Project Phases

4.8.1 Construction

4.8.1.1 It is likely that the first transmission of electricity from the Ossian Array to the National Grid electricity transmission network would occur within four years of the commencement of construction. The overall construction programme for Ossian (i.e. all components of the offshore wind farm, including the Array, and the Ossian Transmission Infrastructure) will cover a longer time period and will be dependent on the detailed phasing of works. The construction timeline and stages will be further detailed within the ES.

Offshore Construction

4.8.1.2 The offshore construction phase will be supported by various vessels which may include support vessels, tug vessels, cable lay vessels, trenching vessels, guard vessels, survey vessels, seabed preparation vessels, crew transfer vessels, and cable protection installation vessels. Helicopters may also be used for crew transfers.

4.8.1.3 The Array Application details the indicative construction and installation stages for the Array infrastructure, including OSPs, which are not described here.

4.8.1.4 Seabed preparation will be undertaken in advance of cable installation, and may include techniques such as boulder clearance, sandwave clearance, pre-construction surveys, cable crossing preparation and removal of disused or out of service cables.

4.8.1.5 The offshore cabling will be transported to the installation site by vessel. Following completion of pre-construction activities detailed in **section 4.5.2**, the Offshore Export Cables will then be installed.

Onshore Construction

4.8.1.6 Construction works are anticipated to take up to four years for the Onshore Transmission Infrastructure although this will be influenced by grid connection dates. However, details of the construction programme will depend on the detailed phasing of works.

4.8.1.7 Normal onshore construction working hours would be Monday to Saturday 07:00-19:00. However, some operations may require work to take place outside these times. For example, Abnormal Indivisible Loads may be encouraged or required to travel overnight and crossings of roads may be constructed overnight to minimise disruption to traffic.

4.8.1.8 Additionally, continuous concrete pours or HDD works may require work outside of these normal construction working hours. These works would be agreed with the relevant Local Planning Authority, where necessary.

4.8.1.9 Details of the approach to construction and likely installation methods are provided within **sections 4.6** and **4.7** above.

Construction Environmental Management

4.8.1.10 Construction of the Ossian Transmission Infrastructure would be managed through a range of management plans. Outline management plans will be included within the applications where appropriate and all commitments will be set out within a Commitments Register, with details of how these will be secured, where relevant.

4.8.1.11 An Environmental Management Plan will be provided, setting out offshore environmental management measures. A range of other management plans will be provided and are likely to include (but not be limited to) the following.

- Marine Pollution Contingency Plan.
- Invasive Non-Native Species Management Plan.
- Cable Plan.
- Vessel Management Plan.
- Navigational Safety Plan.

4.8.1.12 A Code of Construction Practice will be provided in relation to the Onshore Transmission Infrastructure and works at the Landfall, which will set out the principles of good environmental management to be followed during construction such as those relating to dust management, reinstatement of hedgerows, surface water management, flood control and land reinstatement. This will be supported by topic-specific management plans which are likely to include (but not be limited to) the following.

- Construction drainage and water management
- Construction traffic management.
- Construction noise and vibration management.
- Soil management.
- Public rights of way management.

4.8.1.13 Further details of the management proposed during construction are provided in each of the topic sections of this EIA Scoping Report (see **sections 6** to **8** of this EIA Scoping Report).

4.8.2 Operation and Maintenance

4.8.2.1 The Ossian Transmission Infrastructure would be designed to operate on a continuous basis throughout the year. Details of the operation and maintenance activities associated with the Ossian Transmission Infrastructure, including Onshore Converter Stations, Onshore Export Cables (HVDC and HVAC) and Offshore Export Cables, are presented below.

4.8.2.2 The anticipated operational lifetime of the Ossian Array and, therefore the Ossian Transmission infrastructure, is 35 years although it is possible that this operational lifetime could be extended. The Ossian Transmission Infrastructure will require operation and maintenance activities to take place over that lifetime.

Offshore Operation and Maintenance

4.8.2.3 Maintenance activities offshore will include routine inspections, geophysical surveys and replacement of external cable protection. Non-routine major maintenance activities may include cable reburial and cable repair activities.

Routine inspections and geophysical surveys are likely to be undertaken using survey vessels, unmanned surface vessels, and/or remotely operated vehicles. Replacement of external cable protection, or any non-routine major maintenance activities are likely to require specialist vessels such as Construction Support Vessels, cable repair and/or cable laying vessels.

Onshore Converter Station Operation and Maintenance

4.8.2.4 The Onshore Converter Stations would be operational 24 hours/7 days a week. They would be monitored and operated remotely. Operation and maintenance staff would visit the Onshore Converter Stations to undertake preventative and corrective works.

4.8.2.5 It is envisaged that operation and maintenance works would require approximately:

- a week of non-outage maintenance per year;
- a week of outage maintenance every third year; and
- occasional unscheduled maintenance to restore faults or redundancy loss, typically one to three days per month.

4.8.2.6 Operation and maintenance activities would not typically exceed ten vehicles per day.

Landfall and Onshore Export Cables Operation and Maintenance

4.8.2.7 The Onshore Export Cables will be continuously monitored remotely. However, the onshore operation and maintenance requirements for the cables may require infrequent on-site inspections and corrective maintenance activities, if and where they may be required. Following completion of construction, operational access to the Transition Joint Bays and Onshore Export Cables may be required. Land above both the joint bays and link boxes will be reinstated, and an inspection cover will be provided on the surface for link boxes for access during the operation and maintenance phase.

Operation and Maintenance: Management Plans

4.8.2.8 Operation and maintenance of the Ossian Transmission Infrastructure would be managed through a range of management plans. Outline management plans will be included within the applications where appropriate and all commitments will be set out within a Commitments Register, with details of how these will be secured, where relevant. These are likely to include (but not be limited to) the following.

- Drainage Strategy for the Onshore Converter Stations.
- Ecology Management Plan
- Landscape Management Plan.

4.8.3 Decommissioning

4.8.3.1 Ossian OWFL is seeking consent for the installation, operation and maintenance of the Ossian Transmission Infrastructure, which would be designed, manufactured and installed for a minimum operational lifetime of 35 years although it is possible that this operational lifetime could be extended. At the end of the operational lifetime, it is anticipated that the Ossian Transmission Infrastructure would be decommissioned.

4.8.3.2 The decommissioning sequence would generally be the reverse of the construction sequence and would involve similar (or lower) types and numbers of vehicles, vessels and equipment.

Offshore Decommissioning

4.8.3.3 The approach for decommissioning the Offshore Export Cables and any external cable protection materials on the seabed is yet to be determined. However, this will be reviewed throughout the lifetime of the Offshore Transmission Infrastructure and good practice guidance at time of decommissioning will be followed. It is anticipated that the Offshore Export Cables and any external cable protection may be fully removed or left *in-situ*. This will be assessed prior to decommissioning. The proposed approach to decommissioning will be discussed further in the ES. An Offshore Decommissioning Programme will be produced.

Landfall and Onshore Decommissioning

4.8.3.4 An Onshore Decommissioning Plan would be developed in a timely manner in consultation with the relevant stakeholders and prior to the commencement of decommissioning. The Onshore Decommissioning Plan would be developed in accordance with the latest available guidance, legislation and any new technologies at the time of decommissioning.

4.8.3.5 The Onshore Converter Stations would have a minimum operational lifetime of 35 years, although it is likely that this operational lifetime could be extended, if required through refurbishment and replacement of equipment. Decommissioning of the Onshore Converter Stations will be reviewed in discussion with the energy system operator and appropriate regulators in the light of any other existing or proposed future use. Where complete decommissioning is required, all electrical infrastructure and buildings would be removed, and any waste arising disposed of in accordance with the waste hierarchy and relevant regulations at the time of decommissioning. Foundations would be broken up and the site reinstated to its original condition or an agreed alternative use.

4.8.3.6 For the purposes of EIA, decommissioning of the Onshore Converter Stations is assumed to be similar to the construction and in reverse sequence.

4.8.3.7 The Onshore Export Cables (HVDC and HVAC) would be decommissioned. HVDC and HVAC cables may be recovered and removed by pulling the cables through the ducts (e.g., for recycling). Otherwise, they would be left in place in the ground with the cable ends cut, sealed and securely buried as a precautionary measure. Cable ducts, joint bays and link boxes would be left *in-situ*, to reduce environmental disturbance.

5. APPROACH TO ENVIRONMENTAL IMPACT ASSESSMENT

5.1. Introduction

5.1.1.1 This section considers the approach to EIA including the assessment methodology and the approach to stakeholder consultation and engagement. Although some of the stages set out below are not formally required for the SOfTI, the EIA process will incorporate all aspects of the Ossian Transmission Infrastructure, including the SOfTI.

5.1.1.2 The EIA process broadly consists of the following stages.

- EIA Screening: The Applicant considers whether EIA is required, based on the scale and nature of the project and the thresholds set out in the EIA Regulations. Taking into account the above, the Applicant has chosen to undertake EIA for the Ossian Transmission Infrastructure[6].
- EIA Scoping: The Applicant produces an EIA Scoping Report (this document) and requests a formal Scoping Opinion. In this case, Scoping Opinions are sought from the Planning Inspectorate and MD-LOT on behalf of Scottish Ministers. Further details of the scoping process are provided in **section 5.2**.
- Pre-application consultation: The Applicant will undertake consultation and engagement during the pre-application period in accordance with the guidance and legislative requirements set out in the Planning Act and the EIA Regulations. This will include community consultation and technical engagement with stakeholders throughout the EIA process. Further details of the consultation undertaken to date and the pre-application consultation planned to be undertaken ahead of submission of the applications are provided in **section 5.10**.
- Preparation of the PEIR[7]. This report will set out the preliminary findings of the EIA process, including the outcomes of the assessment of likely significant effects during the construction, operation and maintenance, and decommissioning stages of the lifecycle. The PEIR will be the subject of statutory consultation.
- Preparation of the ES: Taking into account the consultation process and refinements to the design of the Ossian Transmission Infrastructure, the assessment will be updated. The findings of this updated assessment will be presented in the ES to accompany the applications for development consent.
- Determination: The competent authorities are required to examine all the environmental information, including the ES, as well as any comments and representations received from consultation bodies and the public, to enable them to reach a reasoned decision with regard to whether or not consent should be granted. Further details of the consenting process are set out in **section 2.2**

5.2. Scoping Process

5.2.1.1 Scoping is the approach to identifying the issues to consider within the EIA process (establishing the scope of the assessment). As set out in **section 1.4** of this EIA Scoping Report, scoping is an important preliminary stage, which sets the context for the rest of the EIA process. Through scoping, the key environmental issues are identified at an early stage, which permits subsequent work to concentrate on those environmental topics for which significant effects may arise.

5.2.1.2 Scoping should be iterative, informed by increasing knowledge acquired through the EIA process. **Figure 5.2.1** highlights some of the key inputs to the scoping process. These inputs include the identification of the project components and activities, the characteristics of the environment and the requirements of the EIA Regulations. This information is used to inform the scope of assessment through the use of scoping workshops, consultation and the findings of initial assessment by topic specialists.

Figure 5.2.1: Overview of the Scoping Process

[6] It is noted that the SOfTI, if considered alone, is not likely to result in significant effects such that EIA is formally required. Nevertheless, in line with good practice and in order to assess the effects of the Ossian Transmission Infrastructure as a whole, the EIA process is proposed to include all elements of the Ossian Transmission Infrastructure, including the SOfTI, EOfTI, Landfall and Onshore Transmission Infrastructure.

[7] Publication of PEIR is not a requirement for a marine licence for the SOfTI. However, the PEIR published for consultation will include an assessment of all elements of the Ossian Transmission Infrastructure, including the SOfTI.

5.2.1.3 This EIA Scoping Report presents the findings of the scoping stage. Taking into account the work undertaken to date, it identifies the topics and impacts that will be considered within the EIA process and reported within the ES. Each topic area is considered, setting out the proposed scope of assessment and identifying any impacts proposed to be scoped out (where no significant effects are likely).

5.2.1.4 Scoping Opinions are requested from the Secretary of State and from Scottish Ministers, which will inform the scope of the assessment process. As assessment work continues and surveys are completed, new issues may arise, or it may become apparent that some potential impacts would not result in significant effects. Where this is the case, the findings of the assessment will be discussed with consultees to refine the scope of the assessment as appropriate throughout.

5.2.1.5 It should be noted that in **section 6** of this EIA Scoping Report, baseline text is presented separately for the SOfTI and EOfTI, where there is a difference between jurisdictions (e.g. designated sites, specific habitat types). Where a distinction between the baseline in Scottish and English waters cannot be made or is not required, for example, where receptors are highly mobile (e.g. marine mammals, birds, fish and shellfish), the baseline describes the full study area under a sub-section labelled 'General' and is relevant to both Scottish and English waters.

5.3. EIA Guidance

5.3.1.1 Relevant guidance will be considered, including that set out in **Table 5.3.1**.

Table 5.3.1: EIA Guidance

EIA guidance documents
National Policy Statements and other relevant national policy
Overarching National Policy Statement for Energy (EN-1) (Department for Energy Security and Net Zero, 2023a).
National Policy Statement for Renewable Energy Infrastructure (EN-3) (Department for Energy Security and Net Zero, 2023b).
National Policy Statement for Electricity Networks Infrastructure (EN-5) (Department for Energy Security and Net Zero, 2023c).
National Planning Policy Framework (Ministry of Housing, Communities and Local Government and Department for Levelling Up, Housing and Communities, 2024).
Planning Inspectorate guidance
Planning Inspectorate Advice Note Seven: Environmental Impact Assessment: process, preliminary environmental information and environmental statements (Planning Inspectorate, 2020).
Planning Inspectorate Advice Note Nine: Rochdale Envelope (Planning Inspectorate, 2018).
Planning Inspectorate (2024a) Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment.
Planning Inspectorate (2024b) Nationally Significant Infrastructure Projects: Advice on Transboundary Impacts and Processes.
Planning Inspectorate (2024c) Nationally Significant Infrastructure Projects: Advice on Habitats Regulations Assessments.
Planning Inspectorate (2024d) Nationally Significant Infrastructure Projects: Advice on the Water Framework Directive.
Planning Inspectorate (2024e) Nationally Significant Infrastructure Projects: Advice on EIA Notification and Consultation.
Planning Inspectorate (2024f) Nationally Significant Infrastructure Projects: Commitments Register.
Planning Inspectorate (2024g) Nationally Significant Infrastructure Projects: Advice on Good Design.
Planning Inspectorate (2025) Nationally Significant Infrastructure Projects: Advice on the Preparation and Submission of Application Documents.
Institute of Environmental Management and Assessment (IEMA) guidance
Guidelines for Environmental Impact Assessment (IEMA, 2004).
Environmental Impact Assessment Guide to: Shaping Quality Development (IEMA, 2015).
Environmental Impact Assessment Guide to: Delivering Quality Development (IEMA, 2016).
Delivering Proportionate EIA, A Collaborative Strategy for Enhancing UK Environmental Impact Assessment Practice (IEMA, 2017).
Effective Non-Technical Summaries for Environmental Impact Assessments (IEMA, 2023).
Other relevant guidance
Cumulative Impact Assessment Guidelines, Guiding Principles for Cumulative Impact Assessment in Offshore Wind Farms (RenewableUK, 2013).
Design Manual for Roads and Bridges: Sustainability and Environmental Appraisal. LA 104: Environmental assessment and monitoring (Highways England *et al.*, 2020).
Guidelines for data acquisition to support marine environmental assessments of offshore renewable energy projects (Centre for Environment, Fisheries and Aquaculture Science (Cefas), 2012).
Planning Practice Guidance (Ministry of Housing, Communities and Local Government and Department for Levelling Up, Housing and Communities, 2024).
Marine Scotland Consenting and Licensing Guidance for Offshore Wind, Wave and Tidal Energy Applications (Marine Scotland, 2018).

5.4. Key Principles of the Assessment

5.4.1 Overview

5.4.1.1 The EIA process will assess the impacts likely to arise from the construction, operation and maintenance and decommissioning phases of the Ossian Transmission Infrastructure. The assessment of each environmental topic (as listed in **Table 1.5.2** of this EIA Scoping Report) will form a separate chapter of the ES. For each environmental topic, the following will be addressed.

- Identification of the study area for the topic-specific assessments.
- Description of the legislative and planning policy context.
- Summary of consultation activity undertaken.
- Methodology for assessment and relevant guidance.
- Description of the environmental baseline conditions.
- Presentation of the impact assessment, including the following.
  - Identification of the design parameters or maximum design scenario for each impact assessment.
  - A description of the measures embedded as part of the project, including design measures which seek to prevent, reduce or offset environmental effects.
  - Identification of likely impacts and assessment of the significance of resulting effects.
  - Identification of any further (secondary) mitigation measures required in respect of likely significant effects, together with consideration of any residual effects.
  - Identification of any future monitoring required.
- Assessment of any cumulative effects with other major developments, including those that are proposed, consented and under construction (including, where applicable, those projects, plans or activities that are currently operational that were not operational when baseline data was collected or that have an ongoing effect).
- Assessment of any transboundary effects (i.e., effects on other states).

5.4.1.2 Details of the approach to assessing inter-related effects are set out in **section 5.8** below.

5.4.2 Proportionate EIA

5.4.2.1 This EIA Scoping Report has been developed using a number of tools and processes with the aim of producing a proportionate ES (as per IEMA (2017), and the outputs of The Crown Estate's Offshore Wind Evidence and Change Programme). These tools and processes will also be applied within the ES. The approach to proportionate EIA is summarised in **Figure 5.4.1** and will include use of the following tools in order to deliver a proportionate approach.

- Effective scoping. The approach to be agreed through the scoping process will be carried through to the EIA phase, with ongoing refinement where required through consultation with stakeholders (see below).
- Ongoing engagement. The approach to community and stakeholder engagement throughout the EIA process will allow for ongoing consideration of the necessary scope. Survey findings and the outcomes of assessments will be discussed through the Evidence Plan Process in order to agree refinements to the scope, where appropriate and justifiable. This engagement will include collaboration with other projects, where appropriate and where this may inform the scope of new work required (for example, where opportunities to share data may arise).
- Digital outputs. GIS mapping and digital tools (such as capture of existing datasets) will be used throughout the EIA process to communicate results of the process clearly.

5.4.3 Iterative Design

5.4.3.1 During the EIA process, environmental impacts will be taken into account in the iterative design process, such that the findings of ongoing surveys and assessment work, alongside ongoing pre-application consultation with statutory consultees and the community, will inform subsequent stages of design. EIA will therefore be used as a means of informing the design.

5.4.4 Evidence-based Approach

5.4.4.1 The offshore and onshore elements of the Ossian Transmission Infrastructure are located in an area where there is significant data and knowledge regarding the baseline environment, including data collected for other transmission infrastructure projects (such as Outer Dowsing and Eastern Green Link 3 and 4). Existing data/knowledge has been acquired through surveys, assessments and post-construction monitoring programmes undertaken for other proposed and existing projects, some of which is available in the public domain. It is therefore the Applicant's intention to maximise, where possible, the use of this data and assessments to supplement the site-specific survey data required, to:

- characterise the baseline environment to inform the EIA where data is sufficient and appropriate to do so;
- scope out impacts where there is a clear evidence-base; and
- where impacts are scoped in, to draw upon the pre-existing evidence-base where appropriate.

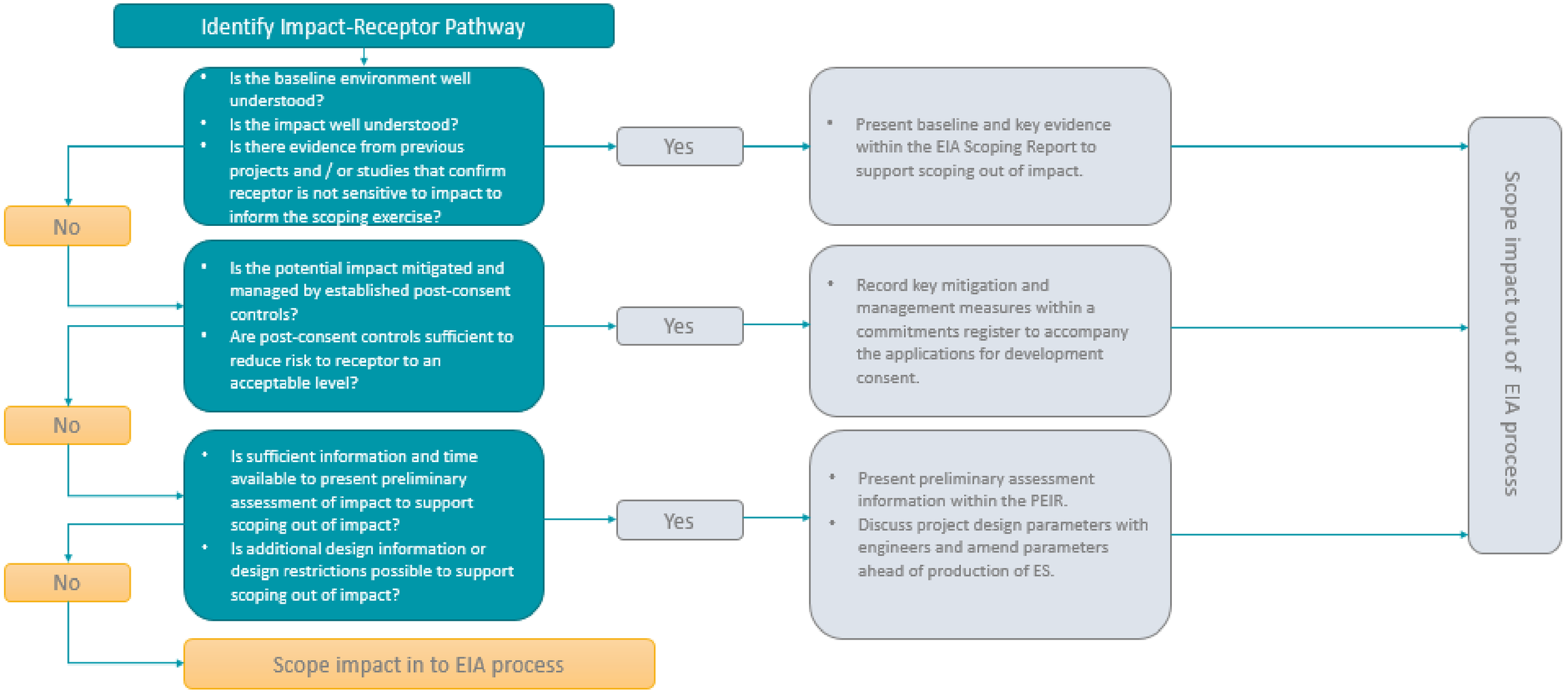

Figure 5.4.1: Approach to Proportionate EIA

5.4.5 Maximum Design Scenario Approach

5.4.5.1 It is often the case that where consent is applied for and obtained before construction commences, there may be design elements that are unknown to an applicant at the time of application. In such cases, a PDE approach (also known as the Rochdale Envelope approach) may be used. The PDE approach defines a design envelope and parameters within which the final design will sit. It allows flexibility for elements that are likely to require more detailed design subsequent to submission of an ES, such as siting of infrastructure and construction methods. It also allows the findings of the consultation process and feedback from statutory and non-statutory stakeholders to be considered during the design process, where appropriate.

5.4.5.2 The adoption of this approach allows meaningful EIA to take place by defining a 'Maximum Design Scenario' (MDS) on which to base the identification of likely environmental effects. The MDS is the scenario that would give rise to the greatest impact (and subsequent effect). For example, where several converter station design options are under consideration, the assessment will be based on the option predicted to have the largest magnitude of impact. This may be the option with the largest footprint, the greatest height or the largest area of disturbance during construction, which could vary depending on the topic under consideration. By identifying the MDS for any given impact, it can be concluded that the impact (and therefore the resulting effect) would be no greater for any other design scenario.

5.4.5.3 This approach is recognised in NPS EN-1 (DESNZ, 2023a), NPS EN-3 (DESNZ, 2023b) and NPS EN-5 (DESNZ 2023c).

5.4.5.4 The ES will set out the PDE, including the key design parameters within the project description chapter. Each topic chapter of the ES will set out the MDS relevant to each impact assessed, along with a justification for its use.

5.4.6 Uncertainty

5.4.6.1 There is some degree of inherent uncertainty within the EIA process, in relation to factors such as future improvements to construction and design, the potential effects of climate change on existing receptors and in terms of the margin of error within forecasting or modelling tools. The text below sets out the proposed approach to addressing uncertainty. In all cases, where uncertainty exists, this will be identified within the relevant chapter of the ES, together with details of the measures that have been taken to reduce uncertainty as far as reasonably practicable.

Future Baseline and Assessment Years

5.4.6.2 The baseline for the assessment of environmental effects will primarily be drawn from evidence collated during review of desktop data and site-specific environmental surveys. Consideration will also be given to any likely changes between the time of data collection/survey and the future baseline for the construction, operation and maintenance, and decommissioning of the Ossian Transmission Infrastructure. In some cases, these changes may include the construction or operation of other planned developments in the area. Where such developments are built and operational at the time of writing and data collection, these will be considered to form part of the baseline environment (unless they have an ongoing effect). Where sufficient and robust information is available, such as expected traffic growth figures, other future developments will be considered as part of the future baseline conditions. In all other cases, planned future developments will be considered within the assessment of cumulative effects.

5.4.6.3 The consideration of future baseline conditions will also take into account the likely effects of climate change, as far as these are known at the time of writing. It is recognised that there will be some element of uncertainty regarding future trends in environmental conditions and climate. Where accepted methodologies for identifying the likely effects of climate change are available, these will be considered in the assessment. For example, the UK Climate Projections project (UKCP18) provides information on plausible changes in climate for the UK (Met Office, 2018). Recent published research will also be reviewed to inform judgements on whether specific receptors are susceptible to the effects of climate change.

Forecasting and Modelling

5.4.6.4 Where forecasting and modelling tools are used, care will be taken to ensure that the tool selected is appropriate for the assessment, taking into account topic-specific good practice and guidance. Model assumptions will be described, and calibration will be used to ensure a reasonable degree of accuracy in measurements. Where required, uncertainty may be addressed by undertaking modelling for a number of scenarios and at representative points across the Ossian Transmission Infrastructure, where applicable. Topic chapters within the ES will set out measures taken to address any uncertainty with regard to modelling inputs and outputs.

5.5. Proposed EIA Methodology

5.5.1 Baseline Characterisation

Existing Baseline Conditions

5.5.1.1 The existing and likely future environmental conditions in the absence of the Ossian Transmission Infrastructure are known as 'baseline conditions'. Each topic chapter will include a description of the current (baseline) environmental conditions. This will be informed by:

- primary baseline studies (such as field studies, where relevant);
- review of secondary sources (desk-based assessment and review of existing information and data local to or otherwise relevant to the Ossian Transmission Infrastructure); and
- stakeholder engagement (detailed discussions with a range of relevant stakeholders to help expand on the findings from wider field and desk-based studies).

5.5.1.2 The baseline conditions within the topic study area will form the basis of the assessment, enabling the likely significant effects to be identified through a comparison with the baseline conditions.

Future Baseline Conditions

5.5.1.3 The consideration of future baseline conditions will take into account the likely effects of climate change, as far as these are known at the time of writing. This will be based on information available from the UK Climate Projections project, developed by the Met Office (UKCP18), which provides information on plausible changes in climate for the UK.

5.5.1.4 Topic authors will also consider other factors relevant to identification of future baseline conditions, such as trends in population size of protected species or changes in socio-economic conditions over time.

5.5.2 Assessment of Likely Significant Effects

5.5.2.1 Each topic chapter of the ES will clearly define its approach to the evaluation of significance. This section provides details of the overarching methodology proposed for the EIA process. This will be used to inform the approach to assessment for each environmental topic, except where topic-specific guidance or usual practice for that topic indicates otherwise (in which case any alternative approaches will be set out in the relevant chapter).

5.5.2.2 A range of impacts regarding the physical, biological and human environment, for both onshore and offshore receptors, have the potential to arise from the Ossian Transmission Infrastructure. Where a change is caused by an action, this is defined as an ‘impact’. The consequence of an impact is defined using the term ‘effect’.

5.5.2.3 The overarching approach proposed takes into account both the sensitivity of receptors affected and the magnitude of the likely impact in determining the significance of the effect. In all cases, the evaluation of significance will be underpinned by a narrative approach and professional judgement.

Sensitivity or Importance of Receptors

5.5.2.4 Receptors are defined as the physical resource or user group that would be affected by a proposed development. The baseline studies will identify potential environmental receptors for each topic. The sensitivity or importance of a receptor may depend, for example, on its frequency or extent of occurrence at an international, national, regional or local level.

5.5.2.5 Sensitivity will be defined within each ES topic chapter, where appropriate, and will take into account factors including:

- the value/importance of the receptor (for example, in terms of ecological, social/community and/or economic value as defined in CIEEM, 2019);
- the vulnerability of the receptor, which can be defined as the degree to which a receptor is susceptible to injury, damage, or harm from an activity (IPCC, 2007);
- the recoverability or potential for substitution of the receptor (this can include, for example, the ability of a habitat, community or individual to redress or recover from damage sustained as a result of an external factor (MarLIN, 2020).

5.5.2.6 Sensitivity will generally be described using the following scale:

- high;
- medium;
- low; and
- negligible.

5.5.2.7 In some cases, in accordance with topic-specific methodologies, a further category of very high may be used (for example, for features subject to international designations).

5.5.2.8 As a general rule, the above receptor sensitivity levels will be defined as set out in **Table 5.5.1**.

Table 5.5.1: Definitions of Receptor Sensitivity

Sensitivity Level	Typical Descriptor
Very high	Very high importance and rarity, international scale, and very limited potential for substitution. This may include receptors with a very high level of vulnerability.
High	High importance and rarity, national scale, and limited potential for substitution. This may include receptors with a high level of vulnerability.
Medium	High or medium importance and rarity, regional scale, limited potential for substitution. This may include receptors with a medium level of vulnerability.
Low	Low or medium importance and rarity, local scale. This may include receptors with a low level of vulnerability.
Negligible	Very low importance and rarity, local scale. This may include receptors with a very low level of vulnerability.

Descriptions based on DMRB LA104 (Highways England et al., 2020)

Magnitude of Impact

5.5.2.9 Impacts are defined as the physical changes to the environment attributable to a project. For each topic, the likely environmental impacts will be identified. The magnitude of the impact will be described using criteria defined within each topic chapter.

5.5.2.10 The categorisation of the impact magnitude will take into account the following factors:

- extent, defined as spatial or geographical area over which the impact may occur under a suitably representative range of conditions;
- duration, defined as the time over which an impact occurs in relation to ecological characteristics (such as the lifecycle of a species) as well as human timeframes, and may be described as short, medium or long-term and permanent or temporary;

- frequency, defined as the number of times or how often an activity occurs over the relevant phase of the Ossian Transmission Infrastructure and will influence the resulting impact; and
- reversibility, where an irreversible impact is one from which recovery is not possible within a reasonable timescale or there is no reasonable chance of action being taken to reverse it, and a reversible impact is one from which recovery is possible or which may be counteracted by mitigation, noting that in some cases, the same activity can cause both reversible and irreversible impacts (Highways England *et al.,* 2020; CIEEM, 2019).

5.5.2.11 Impacts will be defined as either adverse or beneficial. They may also be described as:

- permanent: impacts that result in a permanent or irreversible impact (such as a loss of habitat or land use that will not be restored following construction);
- temporary: impacts that are of a defined duration, such as impacts that will occur in one phase and will then be reversed (e.g. habitat loss or land use change occurring during construction where that land will be restored at the end of the construction phase);
- direct: arise from activities associated with the project. These tend to be either spatially or temporally concurrent; or
- indirect: impacts on the environment which are not a direct result of the project, often produced away from the site or as a result of a complex pathway.

5.5.2.12 Unless otherwise defined within topic chapters of the ES, the following descriptions will be used to describe the duration of impact:

- short term: a period of months, up to one year;
- medium term: a period of more than one year, up to five years; or
- long term: a period of greater than five years.

5.5.2.13 Impacts will be divided into those occurring during the construction, operation and maintenance and decommissioning phases. Where appropriate, ES chapters will refer to temporary and permanent impacts.

5.5.2.14 Magnitude will generally be described using the following scale:

- high;
- medium;
- low; and
- negligible.

5.5.2.15 In some cases, a further category of 'no change' may be used (where no adverse or beneficial impact is predicted for a specific receptor or part of the project).

5.5.2.16 As a general rule, the above magnitude of impact levels will be defined as set out in **Table 5.5.2**.

Table 5.5.2: Definitions of Magnitude of Impact

Magnitude Level	Typical Descriptor
High	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements (adverse).
	Large scale or major improvement of resource quality; extensive restoration or enhancement; major improvement of attribute quality (beneficial).
Medium	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements (adverse).
	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality (beneficial).
Low	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements (adverse).
	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring (beneficial).
Negligible	Very minor loss or detrimental alteration to one or more characteristics, features or elements (adverse).
	Very minor benefit to or positive addition of one or more characteristics, features or elements (beneficial).
No change	No loss or alteration of characteristics, features or elements; no observable impact in either direction.

Descriptions based on DMRB LA104 (Highways England et al., 2020)

Evaluation of Significance of Effect

5.5.2.17 An effect is the consequence of an impact. The EIA Regulations require identification of the effects that would be significant, in order to inform decision-making. To assist in that determination, levels of significance are typically assigned to effects. The significance level is determined by considering both the sensitivity of the receptor affected and the magnitude of the impact.

5.5.2.18 The magnitude of an impact does not generally directly translate into significance of effect. For example, an effect of moderate significance may arise as a result of a relatively modest impact on a resource of national value, or a large impact on a resource of local value. In broad terms, therefore, the significance of the effect depends on both the impact magnitude and the sensitivity of the receptor.

5.5.2.19 Significance levels will be defined separately for each topic, taking into account relevant topic-specific guidance, based on the following scale and guidance.

- Substantial: Only adverse effects are normally assigned this level of significance. They represent key factors in the decision-making process. These effects are

generally, but not exclusively, associated with sites or features of international, national or regional importance that are likely to suffer a most damaging impact and loss of resource integrity.

- Major: These beneficial or adverse effects are considered to be very important considerations and are likely to be material in the decision-making process.
- Moderate: These beneficial or adverse effects may be important but are not likely to be key decision-making factors.
- Minor: These beneficial or adverse effects may be raised as local factors. They are unlikely to be critical in the decision-making process but are important in enhancing the subsequent design of the project.
- Negligible: No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

5.5.2.20 **Table 5.5.3** sets out the general approach proposed to inform the assessment of significance based on the sensitivity of the receptor and the magnitude of impact. This matrix will inform the topic-specific methodologies. For some topics, a simplified approach is considered appropriate or the approach may be informed by topic-specific guidance. In the interest of proportionality:

- an impact of 'negligible' magnitude will always lead to a non-significant effect due a maximum possible significance of 'minor' as per the matrix approach included in **Table 5.5.3**; and
- receptors of 'negligible' importance, value or sensitivity will always lead to a non-significant effect due to a maximum possible significance of 'minor' as per the matrix approach included in **Table 5.5.3**.

Table 5.5.3: Assessment Matrix

Sensitivity	Magnitude of impact				
	No change	Negligible	Low	Medium	High
Negligible	No change	Negligible	Negligible or Minor	Negligible or Minor	Minor
Low	No change	Negligible or Minor	Negligible or Minor	Minor	Minor or Moderate
Medium	No change	Negligible or Minor	Minor	Moderate	Moderate or Major
High	No change	Minor	Minor or Moderate	Moderate or Major	Major or Substantial
Very high	No change	Minor	Moderate or Major	Major or Substantial	Substantial

Broadly based on DMRB LA104 (Highways England et al., 2020)

5.5.2.21 Professional judgement will be used to define the magnitude of impact and receptor sensitivity. The matrix will then be used, together with professional judgement, to evaluate the significance of effect. Where more than one option is available in the significance matrix, the significance of effect will be determined by the author using professional judgement. In general, a significance of effect of moderate or greater is considered 'significant'. For each topic chapter within the ES, what is considered 'significant' will be clearly defined.

5.5.3 Assessment of Likely Significant Effects for the EOfTI and SOfTI

5.5.3.1 As set out in **paragraph 1.3.1.4**, a single ES will be provided, setting out the effects of the Ossian Transmission Infrastructure, including the Onshore Transmission Infrastructure, Landfall, EOfTI and SOfTI.

5.5.3.2 As set out in **section 2.2**, the EOfTI falls within the jurisdiction of a section 35 direction and will be included within the application for development consent (together with the Landfall and Onshore Transmission Infrastructure) under the Planning Act 2008. The application for a Marine License for the SOfTI will be made separately to MD-LOT under the MCAA 2009. Nevertheless, it is considered appropriate to carry out a single EIA process and present a single ES for the Ossian Transmission Infrastructure (including the SOfTI, EOfTI, Landfall and Onshore Transmission Infrastructure) to support both applications. In line with pre-application discussions, a single ES provides benefits in terms of consistency to the impact assessment, as well as streamlining the licencing and consenting process for regulatory bodies. Furthermore, it is advantageous to those stakeholders who sit across both English and Scottish waters, such as the Maritime and Coastguard Agency and the Royal National Lifeboat Institution. Notwithstanding this, to aid decision-making and reviews by stakeholders within different jurisdictions, relevant distinctions will be made between aspects of the EOfTI and SOfTI, such as specific policy and guidance relevant to each jurisdiction, MDS parameters within each jurisdiction or potential impacts relevant to each jurisdiction

5.5.3.3 The ES will outline clearly the works and assessment within each jurisdictional area. Where relevant, the project description chapter of the ES will present the divide between the SOfTI and the EOfTI, with a summary of the parameters for each jurisdictional area where there are differences (for example, length of Offshore Export Cable, number of cable crossings, footprint of cable trench). It will be made clear where there are no differences in the parameter values between Scottish and English waters, which will avoid duplication and repetition.

5.5.3.4 It is proposed that the baseline sections within technical chapters of the ES will present separate sections for the SOfTI and EOfTI only where there is a difference between jurisdictions (e.g. designated sites, specific habitat types). For topics where it is not possible to make a distinction between the baseline in Scottish and English waters, for example, where receptors are highly mobile (e.g. marine mammals, birds, fish and shellfish), the baseline will describe the full study area and it will be noted that this baseline is relevant to both Scottish and English waters.

5.5.3.5 It is proposed that the impact assessment section of each technical chapter of the ES will present the impacts and assessment of effects arising from the SOfTI and EOfTI. For each impact, the assessment of effects will present the magnitude of impact, sensitivity and resulting significance of effects for the SOfTI and the EOfTI, even where the significance of effects is deemed to be the same for both jurisdictions. This will allow the reader and decision-maker to clearly understand

the impacts and significance of effects resulting from the Offshore Transmission Infrastructure in both Scottish and English waters.

5.6. Mitigation Measures and Monitoring

5.6.1 Introduction

5.6.1.1 Mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures.

5.6.1.2 The development of mitigation and enhancement measures (where relevant) forms a key part iterative of EIA, whereby measures are developed throughout the EIA process in response to the findings of initial assessments and stakeholder engagement.

5.6.2 Embedded Mitigation

5.6.2.1 Within the EIA process, the following mitigation measures will be defined as 'embedded mitigation' in line with the IEMA 'Guide to Shaping Quality Development' (IEMA, 2015).

- Primary (inherent) mitigation. These are measures included as part of the project design. IEMA describes these as '*modifications to the location or design of the development made during the pre-application phase that are an inherent part of the project and do not require additional action to be taken'*. This includes modifications arising through the iterative design process. These measures will be secured through the consent itself through the description of the project and the parameters secured in the DCO and/or Marine Licences. These will often be design measures, such as avoidance of sensitive features or a reduction in footprint or height.
- Tertiary (inexorable) mitigation. IEMA describes these as '*actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental effects*'. Such measures may be secured through a Code of Construction Practice or other management plans.

5.6.2.2 Embedded mitigation measures will be taken into account within the assessment of effects for each topic.

5.6.3 Further (Secondary) Mitigation

5.6.3.1 Where the findings of initial assessments with embedded mitigation in place indicate that effects may still be significant, consideration will be given to ways in which the effect may be able to be reduced.

5.6.3.2 This may include the development of further or secondary mitigation measures. IEMA describes secondary mitigation measures as:

'actions that will require further activity in order to achieve the anticipated outcome'.

5.6.3.3 These may include measures required to reduce the significance of environmental effects (such as lighting limits) and may be secured through post-consent management plans. Where secondary measures are proposed, an assessment of the residual effect with these in place will be presented.

5.6.3.4 In summary, where significant effects are identified, a process will be followed until the EIA practitioner is satisfied that either:

- the effect is reduced through design refinement to a level that is not significant;
- secondary measures have been identified that are able to reduce the effect to a level that is not significant; or
- no further embedded or secondary mitigation can be applied to reduce the impact magnitude (and hence the significance of the effect). In these cases, an overall effect that is still significant may be presented and will be considered by the decision-maker in the planning balance, alongside factors such as the need for the project.

5.6.3.5 Both embedded and secondary measures will be presented within a Commitments Register, to accompany the applications for development consent and for the Marine Licence. This will clearly outline all measures proposed and the methods by which they will be secured.

5.6.4 Enhancement

5.6.4.1 In some cases, the measures identified through the iterative EIA process or through stakeholder consultation will result in enhancement of environmental conditions. Any such measures will be reported in the ES and included within the Commitments Register.

5.6.5 Monitoring

5.6.5.1 Monitoring commitments may be put in place, as necessary, to assess the effectiveness of mitigation measures and validate assessment conclusions. Any such measures will be reported in the ES and included within the Commitments Register.

5.7. Cumulative Effects with Other Projects

5.7.1 Introduction

5.7.1.1 The EIA Regulations require consideration of cumulative effects, which are effects on a receptor that may arise when the Ossian Transmission Infrastructure is considered together with other proposed developments.

5.7.1.2 The cumulative effects assessment (CEA) for the Ossian Transmission Infrastructure will be undertaken in accordance with the relevant guidance, including the Planning Inspectorate's Advice on Cumulative Effects Assessment (Planning Inspectorate, 2024a) and Marine Scotland Consenting and Licensing guidance (Marine Scotland 2018).

5.7.1.3 Four key stages are proposed (albeit these may be iterative):

- establishing the long list;
- establishing the short list.
- information gathering; and
- assessment.

5.7.2 Establishing the Long List

5.7.2.1 An initial 'long list' of projects will be developed to identify all potential projects to be considered in the CEA. This will be based on the Zone of Influence (ZoI) identified for each topic of the ES. The ZoIs will be mapped and used as the basis for the search area for other proposed developments.

5.7.2.2 The Planning Inspectorate's Advice on Cumulative Effects Assessment recommends that the CEA should take into account other existing and, or approved development(s) that are:

- Tier 1:
  - under construction;
  - permitted applications under the Planning Act or other regimes but not yet implemented;
  - submitted applications under the Planning Acting or other regimes but not yet determined; and
  - all refusals subject to appeal procedures not yet determined.
- Tier 2:
  - projects on the Planning Inspectorate's project of programmes.
- Tier 3:
  - projects on the Planning Inspectorate's programme of projects where a scoping report has not been submitted;
  - identified in the relevant Development Plan and emerging Development Plans, with appropriate weight given as they near adoption, recognising that there will be limited information available on the relevant proposals;
  - identified in other plans and programmes, as appropriate, which set the framework for future development consents or approvals, where such development is reasonably likely to come forward.

5.7.2.3 A decreasing level of detail is likely to be available from Tier 1 to Tier 3 and this will be reflected in the weight to be allocated in the CEA.

5.7.2.4 The above categories identified by the Planning Inspectorate are broadly similar to those identified in the Marine Scotland guidance (Marine Scotland, 2018). Consultation will be undertaken with MD-LOT regarding relevant offshore projects to be included.

5.7.2.5 For the Ossian Transmission Infrastructure, other proposed major developments will be taken into account within the CEA, including but not limited to the Ossian Array.

5.7.3 Establishing the Short List

5.7.3.1 The following staged process will be used for each impact-receptor pathway to reduce the initial long list.

- Conceptual overlap – an impact-receptor pathway (in EIA terms) describes an impact which has the potential to directly or indirectly affect the receptor(s) in question. This is defined here as a conceptual overlap.
- Physical overlap – ability for impacts arising from the Ossian Transmission Infrastructure to overlap with those from other projects/plans on a receptor basis. An overlap of the physical extents of the impacts arising from the two (or more) projects/plans must be established for a cumulative effect to arise. There are exceptions to this for certain mobile receptors that may move between, and are subject to, two or more separate physical extents of impact from two or more projects.
- Temporal overlap – for a cumulative effect to arise from two or more projects, a temporal overlap of impacts arising from each must be established. Some impacts are active only during certain phases of development (e.g. piling noise during construction). However, the absence of a strict overlap may not necessarily mean there is no potential for cumulative effect, as receptors may become further affected by additional, non-temporally overlapping projects.

5.7.3.2 Competent, experienced and knowledgeable technical specialists will carry out this screening stage based upon the current guidance and regulations. After review of the long list, the remaining projects or plans are taken forward to the assessment stage.

5.7.3.3 The short listing process will be documented within the ES.

5.7.4 Information Gathering

5.7.4.1 Details available regarding the other proposed developments will be collated. This will include details such as:

- proposed design and location information;
- proposed programme of construction, operation and decommissioning (where available); and
- environmental assessments that set out baseline data and effects arising from the other existing and, or approved development.

5.7.5 Assessment Stage

5.7.5.1 At the assessment stage, information is gathered on the projects, plans or activities, to be taken forward into the CEA. The level of detail will be proportionate to the information available.

5.7.5.2 The CEA for the Ossian Transmission Infrastructure will draw on and be informed by the assessments set out in the EIA Report for the Ossian Array. This will ensure that the cumulative effects of the transmission and generation infrastructure are considered, where relevant.

5.7.5.3 The status of other developments to be included in the CEA will be monitored, and if relevant will be included within the CEA. The final scope and identified projects

of the CEA will be agreed with consultees as appropriate. A cut off time for CEA updates of 3 months prior to submission of the applications is proposed (although in some cases an earlier cut off of 6 months may be required where data requires modelling). After this time, further updates will not be able to be accommodated within the ES. This will allow assessments to be made and reported within the ES.

5.8. Inter-related Effects

5.8.1.1 The EIA Regulations require consideration of the interactions or inter-relationships between EIA topics that may lead to additional environmental effects. Inter-relationships between topics may lead to a greater environmental effect in combination with each other than they otherwise would when considered in isolation. This can take the form of different impacts within the same topic through the lifetime of the Ossian Transmission Infrastructure (construction, operation and maintenance and decommissioning) and impacts on receptors between different topics.

5.8.1.2 Inter-related effects are defined in the Planning Inspectorate's Advice Note Nine, section 4.13 (Planning Inspectorate, 2018) as:

'interactions between aspect assessment includes where a number of separate impacts, e.g. noise and air quality, affect a single receptor such as fauna'

5.8.1.3 The approach to the assessment of inter-related effects will consider two types of effect.

- Project lifetime effects: effects that occur throughout more than one phase of the proposed development (e.g., construction, operation and maintenance and/or decommissioning).
- Receptor-led effects: effects that interact spatially and/or temporally resulting in inter-related effects upon a single receptor (such as noise and air quality effects at the same location).

5.8.1.4 The assessment of inter-related effects will be undertaken with specific reference to the potential for such effects to arise in relation to receptor groups (i.e., the assessment will, in the main, not assess every individual receptor assessed at the EIA stage, but rather, potentially sensitive groups of receptors).

5.8.1.5 Inter-related effects on each receptor or receptor group will be assessed as follows:

- the topic chapters of the ES will be reviewed to identify receptors or receptor groups which will require assessment, as well as the likely effects on each receptor or receptor group; and
- an assessment will be undertaken into how the combination of individual effects may create inter-related effects on each receptor or receptor group (such as ecosystems) for both project lifetime effects and receptor-led effects. A conclusion will then be determined on likely significant inter-related effects.

5.8.1.6 If the significance of an effect has been identified as negligible across all stages of the Ossian Transmission Infrastructure within the topic-specific assessment, it is assumed that these effects cannot contribute to any significant lifetime inter-related effects. Therefore, these will not be included in the inter-related effects assessment as it is predicted that the effect will be negligible over the lifetime of the project.

5.9. Transboundary Impacts

5.9.1.1 Transboundary impacts arise when impacts from a project within one European Economic Area (EEA) state affect the environment of another state(s). The need to consider such transboundary impacts has been embodied by the United Nations Economic Commission for Europe Convention on EIA in a Transboundary Context (commonly referred to as the 'Espoo Convention'). The Espoo Convention requires that assessments are extended across borders between parties of the Espoo Convention when a planned activity may cause significant adverse transboundary effects.

5.9.1.2 The assessment of transboundary impacts will be undertaken in accordance with the EIA Regulations and relevant guidance, including the Advice on Transboundary Impacts and Process (Planning Inspectorate, 2024b), which sets out the procedures for consultation in association with an application for development consent, where such development may have significant transboundary effects.

5.9.1.3 The Planning Inspectorate uses the information provided by an applicant to assist in determining the potential for significant effects on the environment in other EEA states.

5.9.1.4 Information about transboundary impacts should be provided by applicants as part of:

- its scoping request under Regulation 8 of the EIA Regulations (if one is made); or
- the suite of documents submitted with the application for development consent and for the Marine Licence.

5.9.1.5 In accordance with the first requirement, identification and screening of transboundary impacts has been undertaken and is presented in Appendix 5.1 of this EIA Scoping Report.

5.10. Approach to Consultation and Engagement

5.10.1 Introduction

5.10.1.1 Ossian OWFL proposes to undertake consultation and engagement in line with its obligations under the EIA Regulations and the Planning Act 2008. The approach to consultation and engagement will take into account the guidance set out in advice provided by the Planning Inspectorate and Scottish Government. In particular, this includes:

- Nationally Significant Infrastructure Projects: Advice on the Consultation Report (Planning Inspectorate, 2024h);
- Nationally Significant Infrastructure Projects: Advice on Habitats Regulations Assessments (Planning Inspectorate, 2024c);
- The Planning Act 2008: Pre-application stage for Nationally Significant Infrastructure Projects (Planning Inspectorate, 2024i); and
- Guidance for Marine Licence Applicants (Marine Scotland, 2015b).

5.10.2 Early Engagement

5.10.2.1 Ossian OWFL has started early engagement with key consultees ahead of the scoping and technical engagement processes, to introduce the project. In addition, two in person Project Information Days were held in Lincolnshire in October 2024, which were advertised locally and open to the public. The Project Information Days mainly focussed on the Landfall and Onshore Transmission Infrastructure, as these would be the works located in closest proximity to local communities. Details of the Project Information Day materials are provided on the Ossian Transmission Infrastructure website:

https://ossiantransmission.com/documents/

5.10.3 Scoping

5.10.3.1 This EIA Scoping Report provides the proposed scope of the EIA process. The Planning Inspectorate and MD-LOT, having received this EIA Scoping Report, will consult with the relevant authorities and statutory consultees to seek their comments. This consultation and engagement will inform the Scoping Opinions provided to the Applicant.

5.10.4 Technical Engagement

5.10.4.1 Since September 2012, applicants for development consent have been able to agree evidence plans with appropriate nature conservation bodies. Evidence plans are formal mechanisms to agree what information is needed as part of an application for development consent. This helps ensure compliance with the Habitats Regulations, and helps applicants provide sufficient information as part of their application.

5.10.4.2 Guidance on the evidence plan approach is provided by Defra in 'Habitats Regulations: Evidence Plans for Nationally Significant Infrastructure Projects' (Defra, 2012) and within the Planning Inspectorate's advice note Nationally Significant Infrastructure Projects: Advice on Habitats Regulations Assessments. Planning Inspectorate (2024c).

5.10.4.3 An Evidence Plan Steering Group has been set up for the Ossian Transmission Infrastructure. Although formal pre-application consultation is not a requirement for the Marine Licence for the works in Scottish waters, relevant stakeholders for the Offshore Transmission Infrastructure in both England and Scotland have been invited to form part of the steering group to ensure coordinated engagement across the project.

5.10.4.4 The steering group includes Ossian OWFL, the Planning Inspectorate, Natural England, the MMO, the Environment Agency, Historic England, the relevant local planning authorities (including Lincolnshire County Council and the South East Lincolnshire Councils Partnership) and NatureScot. Ossian OWFL have commenced engagement with those whom they consider should participate in the Evidence Plan process. In response to this, MD-LOT have confirmed that they will not attend the proposed meetings, but that they would like to be kept informed on the process and receive meeting minutes where relevant to the offshore elements of the Ossian Transmission Infrastructure within Scottish waters. Similarly, the Joint Nature Conservation Committee (JNCC) have been invited to attend meetings. In line with their agreement with Natural England regarding offshore wind, they have confirmed that they will not be involved in the Evidence Plan process.

5.10.4.5 The steering group will meet at key milestones throughout the EIA process. The first meeting was held on 21 January 2025.

5.10.4.6 In addition, Expert Topic Groups (ETGs) will be established to discuss topic-specific issues with relevant stakeholders. ETG meetings with English and Scottish stakeholders will be held at key stages in the EIA process or when new information becomes available for each topic, to provide the opportunity for stakeholders to provide feedback and advice at an early stage. EWGs will be established, as set out in **Figure 5.10.1**.

5.10.4.7 In addition, engagement will be undertaken for other offshore and onshore topic areas. This will include additional working groups (likely to include local authority groups for onshore topics) where required.

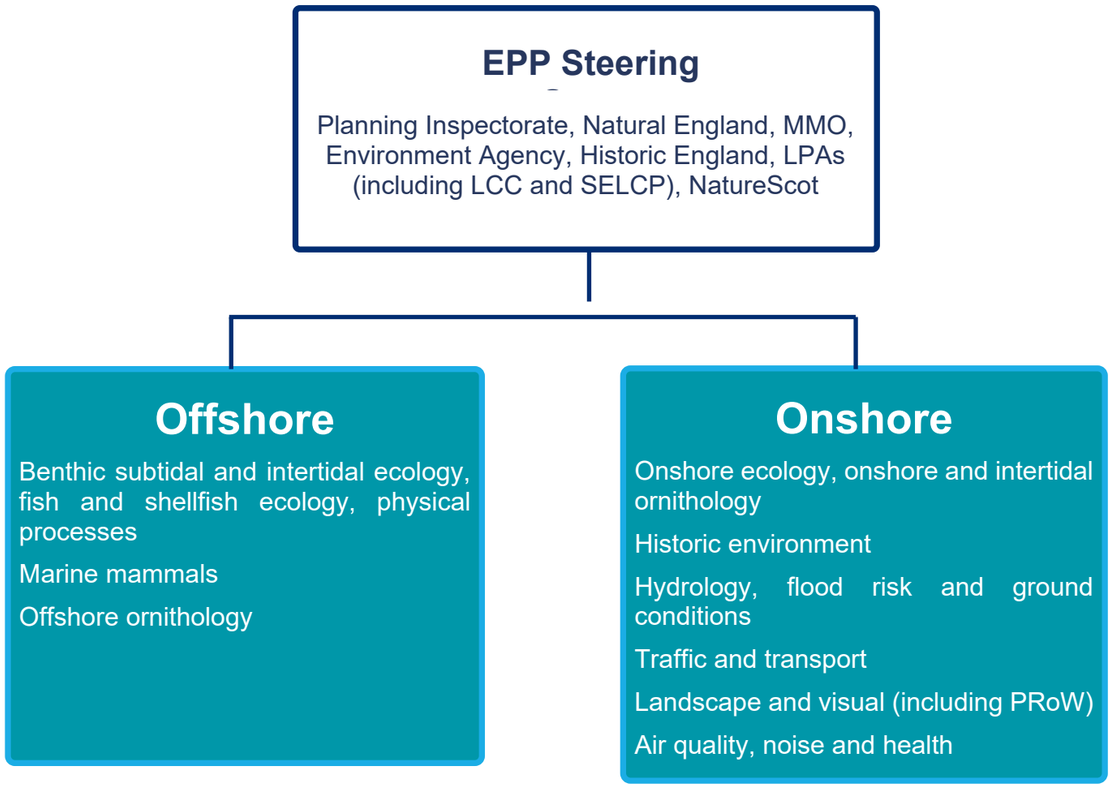

Figure 5.10.1: Evidence Plan Process Structure

5.10.4.8 **Table 5.10.1** provides a summary of engagement undertaken to date.

Table 5.10.1: Engagement Undertaken to Date

Consultee	Topics covered
Evidence Plan Process Steering Group meeting (21 January 2025)	Introduction to Ossian Transmission Infrastructure and proposed EPP structure and terms of reference.

5.10.5 Non-statutory Consultation

5.10.5.1 In addition to the Project Information Days, non-statutory consultation is proposed in early 2025. This consultation is proposed to provide an initial overview of the Ossian Transmission Infrastructure in more detail than was presented at the Project Information Days in October 2024. This will provide an opportunity for consultees (including the public) to express any areas of concern as well as highlighting areas in which feedback is being sought. Anyone who could potentially be affected by, or may have an active interest in, the Ossian Transmission Infrastructure will be encouraged to participate.

5.10.5.2 An online consultation platform (www.ossiantransmission.com) will form a central hub for the consultation, making all information easily accessible and providing a simple way to provide feedback. Consultation will be promoted via a range of techniques including hard copy and electronic mailouts, newspaper advertisements, posters, media releases and social media advertising. Over the consultation period, in-person events are proposed at locations across the area likely to be affected by the Landfall and Onshore Transmission Infrastructure (which are the parts of the project closest to local communities), as well as an online webinar. These will allow those interested in, or affected by, the Ossian Transmission Infrastructure to view the information provided and speak to members of the team.

5.10.5.3 At these events (whether online or in-person), members of the public will be able to view the latest information on the Ossian Transmission Infrastructure, including maps and diagrams illustrating the proposed infrastructure. They will be able to speak directly with members of the Ossian Transmission Infrastructure team (including dedicated stakeholder managers) and ask any questions or raise any concerns they may have. Participants will have the opportunity to complete a feedback form. The dates, venues and times will be confirmed nearer to the time and advertised online and in local media.

5.10.6 Statutory Consultation

5.10.6.1 The approach to statutory community engagement will be set out in a Statement of Community Consultation (SoCC). The SoCC will show how Ossian OWFL will comply with its statutory obligations under section 47 of the Planning Act 2008. It will set out:

- Ossian OWFL's consultation objectives;
- what will be consulted on;
- who will be consulted with and who/when/where; and
- how consultation responses will be addressed.

5.10.6.2 As the Ossian Transmission Infrastructure includes onshore and offshore elements, including Offshore Export Cables in Scottish waters, a pragmatic approach will be taken to the identification of relevant consultees (through discussion with stakeholders about the level of resource available, considering the limited scale of impacts associated with the SOfTI).

5.10.6.3 Statutory consultation under sections 42 and 47 of the Planning Act 2008 will be undertaken as a single phase of consultation (anticipated to be in quarter 4 of 2025). Statutory consultation under section 47 will be undertaken in accordance with the published SoCC. The statutory consultation materials will include a PEIR, which will be prepared in line with the requirements of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. The level of detail required in the PEIR is not defined by regulations, however, it must include preliminary information relating to those topics being assessed during the EIA process.

5.10.6.4 As part of this statutory consultation Ossian OWFL will hold a further round of community consultation events, online and/or in-person. At this stage, the Applicant will specifically consult stakeholders and the local community on the contents of the PEIR and the current stage of design for the Ossian Transmission Infrastructure. The dates, venues and times will be confirmed nearer to the time and advertised online and in local media.

5.10.6.5 During these consultation events, the Applicant may present a more refined design, on which members of the public can comment. Participants will have the opportunity to complete a feedback form.

5.10.6.6 Further rounds of consultation may be undertaken, if required, such as to provide further project updates or targeted consultation in specific locations and/or on particular topics.

5.10.7 Pre-Application Consultation (Scotland)

5.10.7.1 The MCAA 2009 and the Marine Works (EIA) Regulations 2007 do not contain any statutory requirements for pre-application consultation for the Marine Licence pertaining to the SOfTI. However, where appropriate, the principles of engagement proposed under the Planning Act will be extended to the SOfTI. Although not formally applicable to the SOfTI (due to its location over 12 nm from the coast), the processes defined in the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013 will be considered, where relevant and practicable.

5.10.8 Consultation Report

5.10.8.1 A Consultation Report will be prepared and submitted as part of the applications for development consent and Marine Licence that will provide details of the consultation activities (non-statutory and statutory), the responses received and how they have influenced the project.