

MaresConnect Electricity Interconnector Screening Opinion Request – Welsh Offshore Scheme

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Document release form

MaresConnect Interconnector Screening Opinion Request – Welsh Offshore Scheme

Author/s
Eloïse Boblin

Project manager

Authoriser

Emma Langley

Emma Langley

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Declaration: I have carried out the checks and functions listed above

Executive Summary

MaresConnect Limited (MCL) is seeking a Screening Opinion from Natural Resources Wales (NRW) under the Marine Works (Environmental Impact Assessment) Regulations 2007 for the installation, operation, maintenance, and eventual decommissioning of the Welsh marine elements of the MaresConnect Interconnector to confirm that Welsh Offshore Scheme is not subject to formal Environmental Impact Assessment (EIA). The Welsh Offshore Scheme is not Schedule 1 or Schedule 2 and so is not EIA development however, MCL proposes to undertake a comprehensive non-statutory Marine Environmental Assessment (MEA) to support the Marine Licence application and ensure potential environmental impacts are fully assessed. This will propose all relevant impacts the project may have on the environment, as detailed in the Scoping Report (Intertek Metoc, 2026) and refined through consultation, and the approach taken for the assessment of each impact.

Route selection has been informed by extensive feasibility studies and marine surveys, with the preferred alignment designed to minimise environmental and technical constraints. Installation will involve standard subsea cable-laying techniques, including burial where feasible and external protection where necessary. Trenchless installation using either Horizontal Directional Drilling (HDD), pipe drill or micro-tunnelling is the preferred method for landfall installation to avoid sensitive coastal features.

The project area includes several designated sites, including Special Areas of Conservation (SACs) and a Special Protection Area (SPA), supporting habitats such as Annex I reefs and sandbanks, as well as protected marine mammals and seabirds. A Habitats Regulations Assessment (HRA) Screening (and report to inform an Appropriate Assessment (AA), if required) will be undertaken to assess potential impacts on these features.

Potential likely significant environmental effects may include temporary disturbance from installation activities (e.g. noise, sediment suspension). MCL will assess these effects in the non-statutory MEA and will seek to minimise these effects through embedded mitigation, including careful routeing, micro-siting to avoid sensitive habitats, and ongoing consultation with NRW and stakeholders.

Impacts on shipping and commercial fishing are expected to be temporary and manageable through established measures such as stakeholder engagement, Notices to Mariners (NtM), cable burial, and the use of Fisheries Liaison Officers (FLO's). A Navigation Risk Assessment and Fishing Activity Study will further inform mitigation strategies and will be submitted as part of the Marine Licence application.

Extensive survey work has been completed, including geophysical, geotechnical, and environmental surveys, alongside ongoing stakeholder consultation. Additional assessments, including archaeological and cable burial risk assessment studies, will support the final design and consenting process.

Overall, while the Welsh Offshore Scheme has the potential to give rise to some likely environmental and socio-economic effects, these are expected to be largely temporary and can be

effectively mitigated. The non-statutory MEA will provide the necessary information to support regulatory decision-making and demonstrate that the Welsh Offshore Scheme can proceed in an environmentally responsible manner.

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Application contact:

Philip Jordan

Registered office:

MaresConnect Limited

The Victorians

15-18 Earlsfort Terrace

Saint Kevin's

Dublin 2

info@maresconnect.ie

www.maresconnect.ie

Terms and Definitions

Abbreviation	Definition
AA	Appropriate Assessment
ACP	An Coimisiún Pleanála
BTO	British Trust for Ornithology
Capex	Capital Expenditure
Cefas	Centre for Environment, Fisheries and Aquaculture Science
CNG	Compressed Natural Gas
CO ₂	Carbon Dioxide
CPT	Cone Penetrometer Test
CRU	Commission for the Regulation of Utilities
DfT	Department for Transport
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EMF	Electromagnetic Fields
ES	Environmental Statement
EUNIS	European Nature Information System
FLO	Fisheries Liaison Officer
GB	Great Britain
GW	Gigawatts
HAZID	Hazard Identification
HDD	Horizontal Directional Drilling
HRA	Habitat Regulations Assessment
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
ICPC	International Cable Protection Committee
JNCC	Joint Nature Conservation Committee
Km	Kilometre
LNG	Liquified Natural Gas
MARA	Maritime Area Regulatory Authority
MBES	Multi-Beam Echosounder
MCA	Maritime and Coastguard Agency
MCL	MaresConnect Limited
MEA	Marine Environmental Assessment
MHWS	Mean High Water Spring
MoD	Ministry of Defence
MUL	Maritime Usage Licence
MW	MegaWatt
NFFO	National Federation of Fishermen's Organisations
NM	Nautical Mile
NRW	Natural Resources Wales
Ofgem	Office of Gas and Electricity Markets
PECI	Projects of Energy Community Interest
PMI	Project of Mutual Interest
ROI	Republic of Ireland

ROV	Remotely Operated Vehicle
RSPB	Royal Society of the Protection of Birds
RYA	Royal Yachting Association
SAC	Special Area of Conservation
SBP	Sub-Bottom Profiler
SPA	Special Protection Area
SSS	Side-Scan Sonar
SSSI	Site of Special Scientific Interest
TCE	The Crown Estate
TJB	Transition Joint Bay
TYNDP	Ten Year National Development Plan
UK	United Kingdom
UKHO	UK Hydrographic Office
UXO	Unexploded Ordnance
WFA-CPC	Welsh Fishermen's Association – Cymdeithas Pysgotwyr Cymru

1 Introduction

1.1 Purpose of this report

1. MaresConnect Limited (MCL) is requesting a Screening Opinion from Natural Resources Wales (NRW) under the Marine Works (Environmental Impact Assessment) Regulations 2007 (the Regulations) and for the installation of the Welsh Offshore Scheme elements of the MaresConnect Interconnector (MaresConnect). The proposed works are not of a type listed on Schedule A1 and A2 of the Regulations. MCL intends to submit a non-statutory Marine Environmental Assessment (MEA) for the Welsh Offshore Scheme on the basis that an EIA is not required for the Welsh Offshore Scheme, pursuant to the Regulations.
2. Schedule A1 of the Regulations does not include underground or subsea electrical cables as a form of project which require EIA pursuant to the Regulations. Schedule A1 of the Regulations does include overhead electrical power lines with a voltage of 220 kV or more and a length of more than 15 Kilometre (km) as a form of project which requires environmental impact assessment pursuant to the Regulations, but the Welsh Offshore Scheme is not an overhead line.
3. Schedule A2 of the Regulations does not include underground or subsea electrical cables as a form of project which requires screening pursuant to the Regulations. Schedule A2 of the Regulations does include industrial installations for the transmission of electrical energy by overhead cables as a form of project which requires screening pursuant to the Regulations, but the Welsh Offshore Scheme is not an overhead cable.
4. This document provides supporting information for a formal opinion to confirm that a statutory EIA is not required for the installation, operation, maintenance, and eventual decommissioning of the Welsh Offshore Scheme. It provides further information on the following:
 - Project Description, including marine cable installation techniques
 - Potential environmental effects associated with ecology, navigation and commercial fishing
 - Ecological studies and surveys
 - Indicative project timescales

1.2 Project overview

5. MaresConnect is a proposed 750-megawatt (MW) High Voltage Direct Current (HVDC) electricity interconnector linking the power markets of Ireland and Great Britain (GB). The construction of the Interconnector is scheduled to commence in 2028, with testing and full operation from 2030.
6. MaresConnect is being developed by MCL, an Irish project specific company established to develop, construct and operate the interconnector. MCL is a subsidiary of Mares Interconnector Holdings Limited, an Irish limited company, funded by private capital.
7. The United Kingdom (UK) grid connection point will be established at a new extension of an existing substation in Bodelwyddan, North Wales. The preferred Irish grid connection point is currently subject to an ongoing technical review of substations within the Greater Dublin Area. The converter stations will be connected to the substations by High Voltage Alternating Current (HVAC) underground cables onshore, and to each other by High Voltage Direct

- Current (HVDC) onshore and subsea cables. A small fibre-optic cable will be installed alongside the HVDC cables for control and communications.
8. MaresConnect has been awarded an Interconnector Licence in GB by the Office of Gas and Electricity Markets (Ofgem), authorising the operation of an electricity interconnector.
 9. This EIA Screening Opinion Request relates to the Welsh Offshore Scheme only being the component of MaresConnect in the NRW's jurisdiction extending from Mean High Water Springs (MHWS) at the Welsh landfall at (Lady Emily's Tower) at Llanddulas Beach in Conwy, to the UK-Ireland median line, a distance of approximately 39.9 Nautical Mile (NM). Table 1 identifies the component parts of MaresConnect, the infrastructure forming part of that component part, the primary consents required for that component part and the relevant authority for those primary consents.
 10. The Welsh Offshore Scheme relates to the component of MaresConnect from MHWS to the UK-Ireland median line. The Welsh Onshore Scheme relates to all onshore components of MaresConnect in Wales above MHWS. The Irish Offshore Scheme relates to the component from MHWS at the Irish landfall to the UK-Ireland median line and the Irish Onshore Scheme relates to all onshore components of MaresConnect in Ireland above MHWS.
 11. The other component parts of MaresConnect will be subject to the relevant EIA Regulations that apply to those component parts and for which the relevant authority will be responsible.
 12. MaresConnect was awarded Projects of Mutual Interest (PMI) in December 2025.

Table 1-1: Relevant consents and authority for each component of MaresConnect

Component	Infrastructure	Consent Required	Authority
Welsh Onshore	Converter station Onshore cable route	Converter Station Installation – Major Development (outline) under the Town and Country Planning Act 1990	Denbighshire County Council
		Landfall Cable Installation - Major Development (detailed) under the Town and Country Planning Act 1990 or Lawful Development Certificate	Conwy County Borough Council
Welsh Offshore	Offshore cable route (from Welsh MHWS to UK – Ireland median line)	Marine Licence under the Marine and Coastal Access Act 2009	NRW
Irish Onshore	Converter station Onshore cable route	Strategic Infrastructure Development	An Coimisiún Pleanála (ACP)
		Authorisation to Construct	Commission for the Regulation of Utilities (CRU)
Irish Offshore	Offshore cable route (from Irish MHWS to UK – Ireland median line)	Strategic Infrastructure Development	ACP
		Marine Area Consent	Maritime Area Regulatory Authority (MARA)

1.3 Project need

13. Electricity demand in the UK continues to grow, with interconnector imports now representing 13% of gross UK electricity supply as of 2025 (DESNZ, 2025), up from 2% in 2010 (BEIS & DESNZ, 2022). The UK Government set a target of 18 gigawatts (GW) of interconnector capacity by 2030 (HM Government, 2020); however, with newly approved projects, this is now projected to be achieved by 2032 (Ofgem, 2024), which the construction of MaresConnect will help to meet.
14. MaresConnect will help the UK government to meet this target by increasing the cross-border transmission capacity by 750MW between the networks of Ireland and GB, facilitating an efficient exchange of intermittent green energy. This will enable electricity to be transmitted in both directions between Wales and Ireland. This additional capacity is increasingly critical given Ireland's rapidly escalating electricity demand, driven largely by data centre growth — data centres already accounted for 21% of Ireland's total metered electricity consumption in 2023 and are projected to represent approximately 30% of national electricity demand by 2030. Ireland has set an ambitious target of 80% of electricity generated from renewable sources by 2030, and increased interconnector capacity will be essential to meeting this goal by providing security of supply during periods of low renewable generation (SEAI, 2019; LIEA, 2020).
15. MaresConnect will reduce curtailment of surplus wind power by providing a stepping-stone to neighbouring markets and stimulate the development of offshore wind farms in the east of Ireland and the Irish Sea. Crucially, MaresConnect's role as a conduit between Ireland and GB also positions it as an indirect link to continental European energy markets. Ireland is currently interconnected to continental Europe only via Great Britain. For Ireland, MaresConnect represents a key step towards becoming a net exporter of renewable energy, especially offshore wind power, with interconnection essential to maximising the use of abundant renewable resources and allowing excess clean energy to reach wider markets (European Investment Bank, 2022; Foresight, 2026).
16. The location of MaresConnect will reinforce the security of the current electricity supply by utilising a North Wales – County Dublin route, allowing electricity to be transported to where it is required most and supporting both countries' clean energy transition.
17. The main benefits from MaresConnect are expected to be:
 - **Energy Security** – Reinforce security of electricity supply in Ireland and Wales
 - **Savings** – Reduction in wholesale energy prices
 - **Net Zero** – Integration of green energy in GB and Ireland
 - **Jobs** – Supporting jobs in construction, operations and maintenance
 - **Transmission of Electricity** – Equivalent to 570,000 homes
 - **Investment** – €860m of private capital investment which will benefit Ireland and Wales

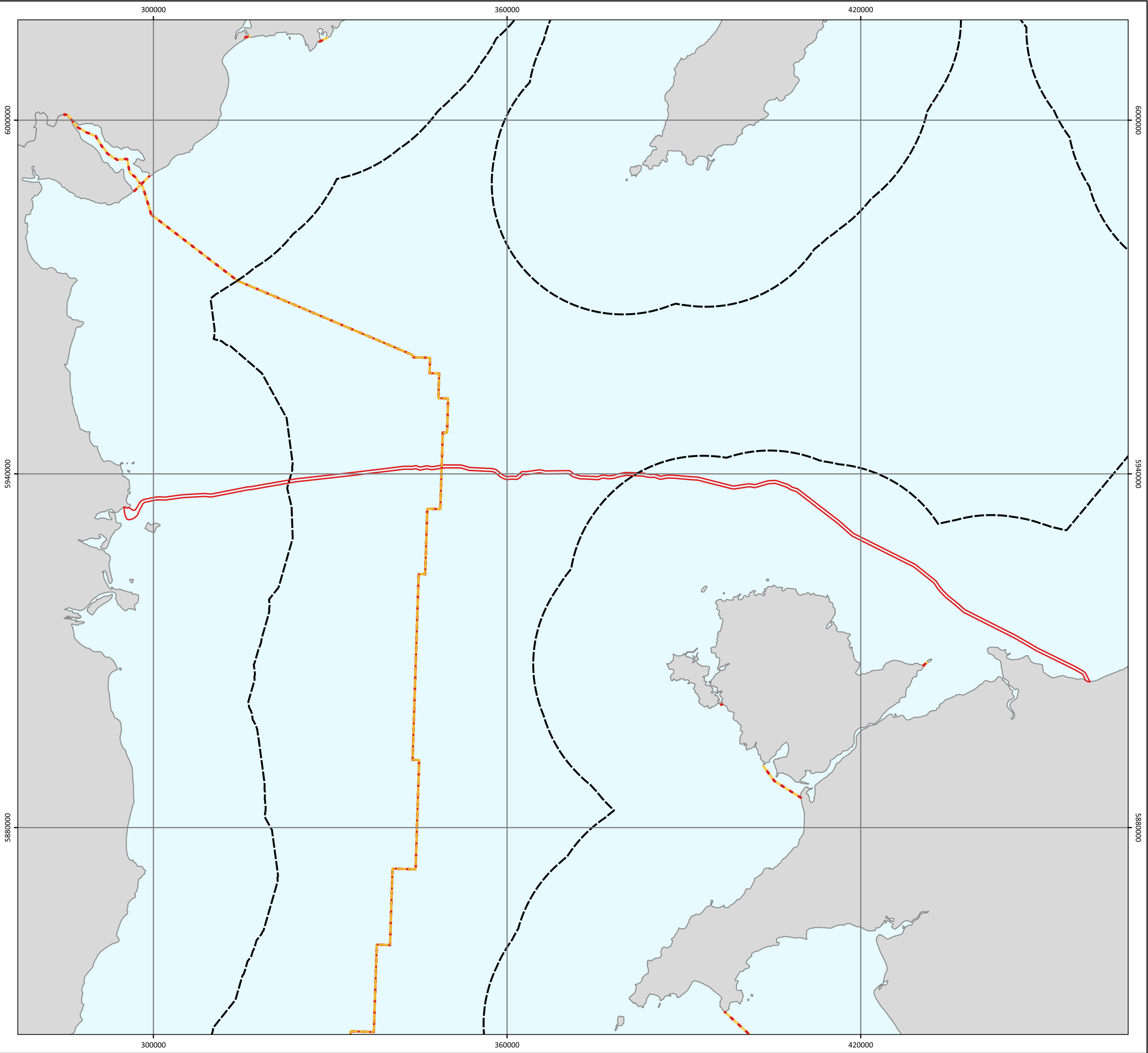
1.4 Alternatives considered

18. MCL commissioned Intertek Metoc (Intertek) to provide a marine route selection report for MaresConnect. The report identified a long list of possible marine cable routes between North Wales to the north of County Dublin, Republic of Ireland (ROI). The outcome was the development of 15 separate routes between three landfall zones in North Wales and five landfall zones in ROI. The three landfall options in Wales were located at Colwyn Bay, Raynes Quarry and Lady Emily's Tower.

19. A Marine Licence for the marine surveys was obtained in 2023, which covered all 15 route options to allow flexibility for the survey. Following further assessment and data made available prior to the survey in 2025, the route for survey was selected using a combination of the proposed route options to provide an optimum route that avoided multiple constraints including sensitive habitats and geohazards. One route was surveyed measuring approximately 121.7km in length from MHWS in Ireland to two landfall options in North Wales (Raynes Quarry and Lady Emily's Tower).
20. The routing has endeavoured to avoid marine protected sites where possible, however due to the high coverage of designations along the North Wales coast complete avoidance cannot be achieved. It is the intention that data acquired during the marine survey campaign will allow identification of sensitive habitats and subsequent micro-routing and/or development of appropriate mitigation.
21. MCL has selected Lady Emily's Tower between Llanddulas and Abergele as the project's preferred landfall location for further development. In April 2025, WSP concluded that the site is considered as a suitable trenchless installation site and the preferred landfall location (WSP, 2025).
22. Routing for the marine cable route is ongoing but will be contained within the Application Area, defined as a 500m corridor.
23. Further information will be presented in the non-statutory MEA.

1.5 Project location

24. The proposed marine cable will be installed from a landfall on the North Wales coast (Lady Emily's Tower) to north County Dublin, Ireland (Figure 1-1, Drawing Number: P2673-LOC-010). Figure 1-2 (Drawing Reference: P2673-LOC-011) shows the location of the proposed marine cable corridor within Welsh inshore and offshore waters.



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MARESCONNECT INTERCONNECTOR

EIA SCREENING

LOCATION OVERVIEW

MaresConnect Route

Drawing No: P2673-LOC-010

A

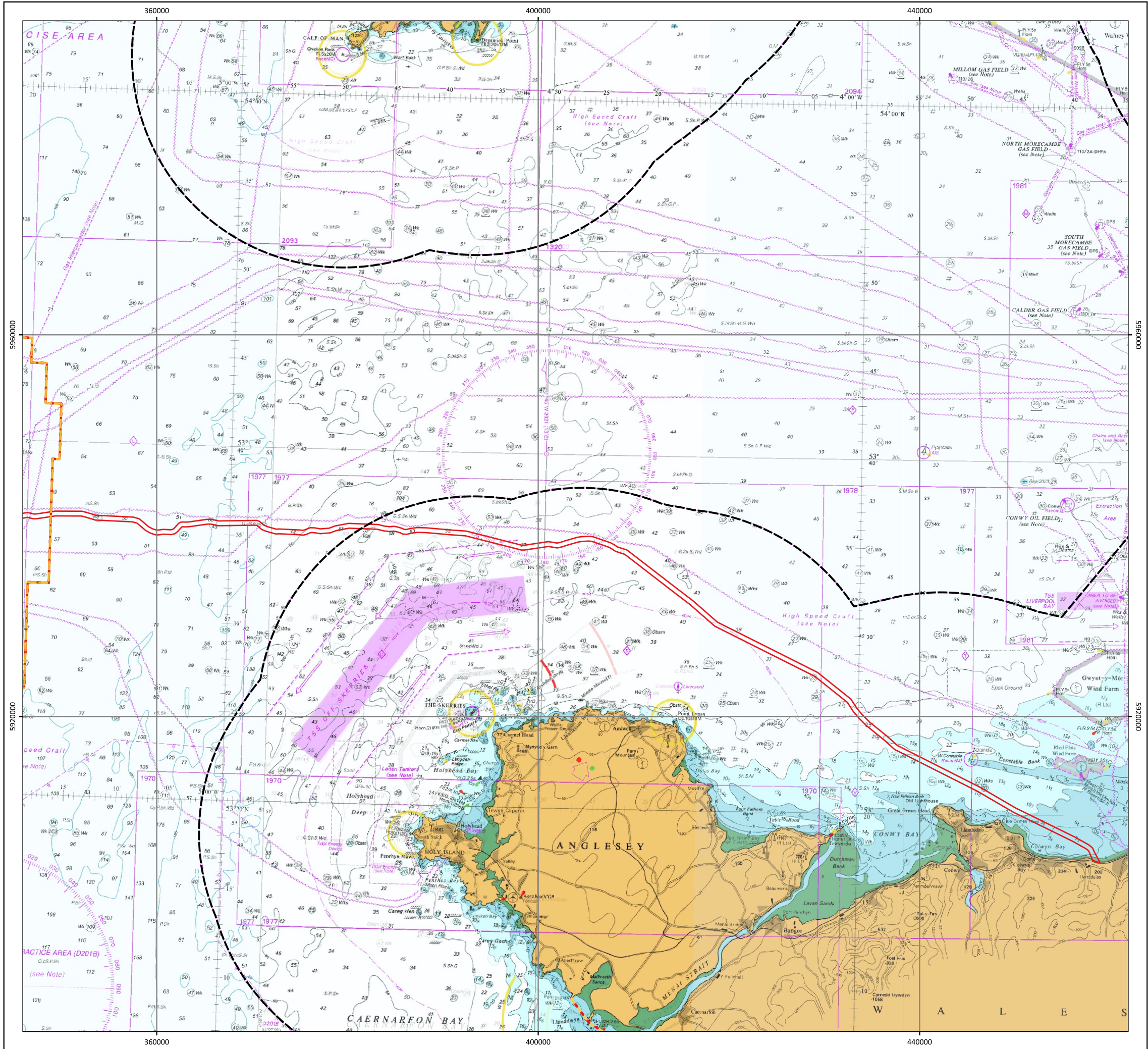
Legend

- 12nm Territorial Sea Limit
- Exclusive Economic Zone Limit
- Maresconnect Cable Route

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File Reference	J:\P2673\Mxd_QGZ\01_LOC\P2673-LOC-010.qgz
Created By	Eloïse Boblin
Reviewed By	Adam Johns
Approved By	Emma Langley

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MARESCONNECT INTERCONNECTOR

EIA SCREENING

LOCATION OVERVIEW

MaresConnect Route - Wales

Drawing No: P2673-LOC-011

A

Legend

- 12nm Territorial Sea Limit
- Exclusive Economic Zone Limit
- Maresconnect Cable Route

NOT TO BE USED FOR NAVIGATION

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Created By	Eloise Boblin
Reviewed By	Adam Johns
Approved By	Emma Langley

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1.6 Report structure

25. This report has been structured to closely follow the list of requirements for EIA screening set out in the Regulations and provided in NRW guidance. It provides further information on the following:
- Section 2: Project description
 - Section 3: Environmental sensitivity of the project area
 - Section 4: Assessment of Likely Significant Effects and proposed mitigation
 - Section 5: Ecological studies and surveys
 - Section 6: Other project applications
 - Section 7: Conclusions

2 Project description

2.1 Project timeline

26. The key stages and indicative timing for the project are outlined in Table 2-1 below.

Table 2-1: Indicative Project Timing

Stage of Development	Time Period
Preparation of MEA	Q2 – Q3 2026
Submission of marine licence application with MEA	End of Q3 2026
Regulator consultation on marine licence application	Q3 2026 – Q2 2027
Determination of marine licence application	2027
Cable installation	2028 - 2029
Operation	2030

27. MaresConnect will be a symmetrical monopole submarine cable system. In a symmetric monopolar configuration, the converter stations are interconnected by two HVDC cables at opposite voltage polarity. Cables can either be installed individually in the seabed with varying widths apart according to water depth, or more commonly bundled together as a pair with no separation between the cables. A fibre optic cable will also be laid for control and communication purposes.

2.2 Pre-installation

28. Marine survey works were completed between February and August 2025 for the full marine route including geophysical, geotechnical and environmental intertidal and subtidal surveys.
29. Further surveys will be completed by the cable installation contractor prior to commencement of cable installation. This typically takes place 3-6 months ahead of installation.
30. The primary objective of these surveys is to confirm that no new obstructions have appeared on the seabed since the detailed engineering surveys and to complete Unexploded Ordnance (UXO) clearance survey. The survey is expected to involve standard geophysical survey techniques (Multi-Beam Echosounder (MBES), Side Scan Sonar (SSS), Sub-Bottom Profiler (SBP) and magnetometer).
31. In general, little or no preparation of the seabed is required prior to laying cables. However,

the marine survey may indicate short sections where some preparation is required. Typical techniques that may be used include:

- Mass flow excavation: in areas of mobile sediments such as sand waves. The technique removes a portion of the sandwave (referred to as pre-sweeping), depositing it on either side of the trench. This removes the excessive inclines on the sandwave, creating a flatter profile for the burial machine.
 - Boulder removal: used in areas of boulder fields. A plough is towed across the seabed which pushes the boulders to one side clearing a swathe for the burial machine.
32. Immediately prior to the installation a heavy grapnel with a series of specially designed hooks, or grapnels (approximately 1m width and 0.5m – 1m penetration depth) will be towed along the centre line of the cable route by either a work boat or the cable lay vessel. The purpose of the pre-lay grapnel run is to clear any debris from the cable route, such as lost fishing gear, that could impact on the cable burial operations. Debris retained by the grapnel will be collected on board and disposed of appropriately through licensed onshore facilities.
 33. The installation contractor is required to undertake a UXO survey and any UXO considered to pose a risk to the operation will be avoided i.e. through micro-routeing. Any UXO that is within the corridor and that cannot be avoided by the acceptable clearance will be moved or removed by a specialist subcontractor.
 34. UXO that is assessed as safe to remove can be recovered with safe and approved practices. As a last resort, UXO will be detonated on site. Detonation is undertaken by either a diver or a Remotely Operated Vehicle (ROV). A separate Marine Licence will be applied for to licence UXO clearance, following a detailed UXO survey and investigation to determine size, location and number of potential devices.

2.3 Installation

35. The cable lay operation will be performed on a 24-hour basis to ensure minimal navigational impact on other users and to maximise efficient use of suitable weather conditions and vessel and equipment time. A 'rolling box' technique will be employed for installation so that only the area required by the installation vessel, its attendant tugs and support vessels will be restricted to other marine traffic. The remainder of the route will remain open to normal marine activities. Notifications will be issued in accordance with statutory procedures to ensure navigational and operational safety. In addition to the installation vessel(s), additional vessels (i.e. guard vessels and support vessels) will be involved with the operation. Although exact details may change, it is likely that the vessels used will consist of a cable lay vessel; cable lay barge; guard vessel(s); and a rock placement vessel.
36. Cable lay vessels can carry cable lengths in bundled configuration up to or even over 100km. It is expected that at least one cable joint will be required for the MaresConnect route. MaresConnect will ensure that if joints are required, as far as possible, they are not located in sensitive areas, such as shipping channels or anchoring grounds where the prolonged location of the installation spread is not desirable.
37. For subtidal marine cable installation, the two HVDC cables and fibre optic cable will be bundled and buried together in a single trench.
38. The Application Corridor crosses one in service telecoms cable. The Project will not cross the Proposed Mona Offshore Wind Farm (OWF) export cable. There are no pipelines that cross the Application Corridor. For in service cable crossings, MaresConnect will enter into formal

crossing agreements with the asset owner. The physical design of the crossing will vary according to, among other things, the size, type, location and burial state of the crossed infrastructure. Generally, the marine cables will cross over infrastructure on a 'bridge' comprised of either a rock berm or concrete mattresses. This section will subsequently be covered over with a protective layer of either rock or mattresses.

39. Cables are buried as the primary means of protection. The recommended target burial depths along the cable route is included in the detailed cable burial study (completed by Intertek). Typically target depth for burial is 1m to 3m below mean seabed level, although this may vary depending on the nature of the substrate. For example, in areas where there is evidence of trawling activity or areas of mobile seabed this may be increased.
40. There are three cable burial methods that are typically deployed; selection is dependent on seabed characteristics:
 - Ploughing – suitable for most types of seabed material, with the exception of rock and some glacial material. The cable is fed from the vessel, through the plough share into the seabed. The forward blades of the plough cut a narrow trench into the seabed and holds it open long enough to depress the cable into the bottom of the trench. The seabed then closes behind the plough.
 - Jetting – most effective in sandy sediment and may not be capable of burying cable in more cohesive sediment. Two methods of jetting are typically:
 - Fluidising the seabed: the cable is laid on the seabed, where a jetting sledge flushes water below it, fluidising the sand. The cable sinks by its own weight to the depth set by the operator. This will result in increased suspended sediment compared to ploughing or forward jetting.
 - Forward jetting a trench: water jets are used to jet a trench ahead of the cable lay. The cable can typically be laid into the trench behind the jetting tool.
 - Rock cutting / trenching – A trench is excavated, displacing the sediment to alongside the trench. The cable is subsequently laid in the trench and the sediment is either returned to the trench or left behind. This can provide an option for burial in harder substrates where the plough and jet burial may not be effective. However, the progress of these machines can be slow.
41. In the methods described above, the cable is depressed directly into the bottom of the trench. The sediment over the cable can be reinstated mechanically or naturally by normal sedimentary processes.
42. The exact specification of the installation burial tool is determined in the detailed design phase, taking into consideration the sediment type along the route and the availability of suitable equipment. Potentially, all three techniques could be used. Where possible the cable will be buried in the seabed. Where the seabed composition is not suitable for burial, external mechanical protection will be provided through either rock-placement, application of concrete mattresses and/or installation of cast iron shells, or marine-grade, polyurethane protection system such as Uraduct.
43. The submarine cables will be connected with the onshore cables in a Transition Joint Bay (TJB) buried in the ground above the high-water mark. The trenchless alignment crosses beneath existing infrastructure including the A55 North Wales Expressway and the North Wales Coast railway line.
44. The proposed installation at the landfall includes the following three trenchless options for

which flexibility will be sought in the marine licence:

- Horizontal Directional Drilling (HDD)
- Direct pipe
- Micro-tunnelling

45. All three trenchless installation methods minimise surface disturbance while enabling precise, controlled cable routing beneath sensitive coastal and onshore environments.

3 Environmental sensitivity of the project area

46. The proposed cable corridor transverses through the following protected sites:

- Y Fenai a Bae Conwy / Menai Strait and Conwy Bay Special Area of Conservation (SAC)
- North Anglesey Marine / Gogledd Môn Forol SAC
- Liverpool Bay / Bae Lerpwl Special Protection Area (SPA)

47. Figure 3-1 (Drawing Reference: P2673-PROT-005) shows the protected sites within the vicinity of the cable corridor.

48. Habitat maps of the region show that the cable corridor potentially contains the following Annex I habitats:

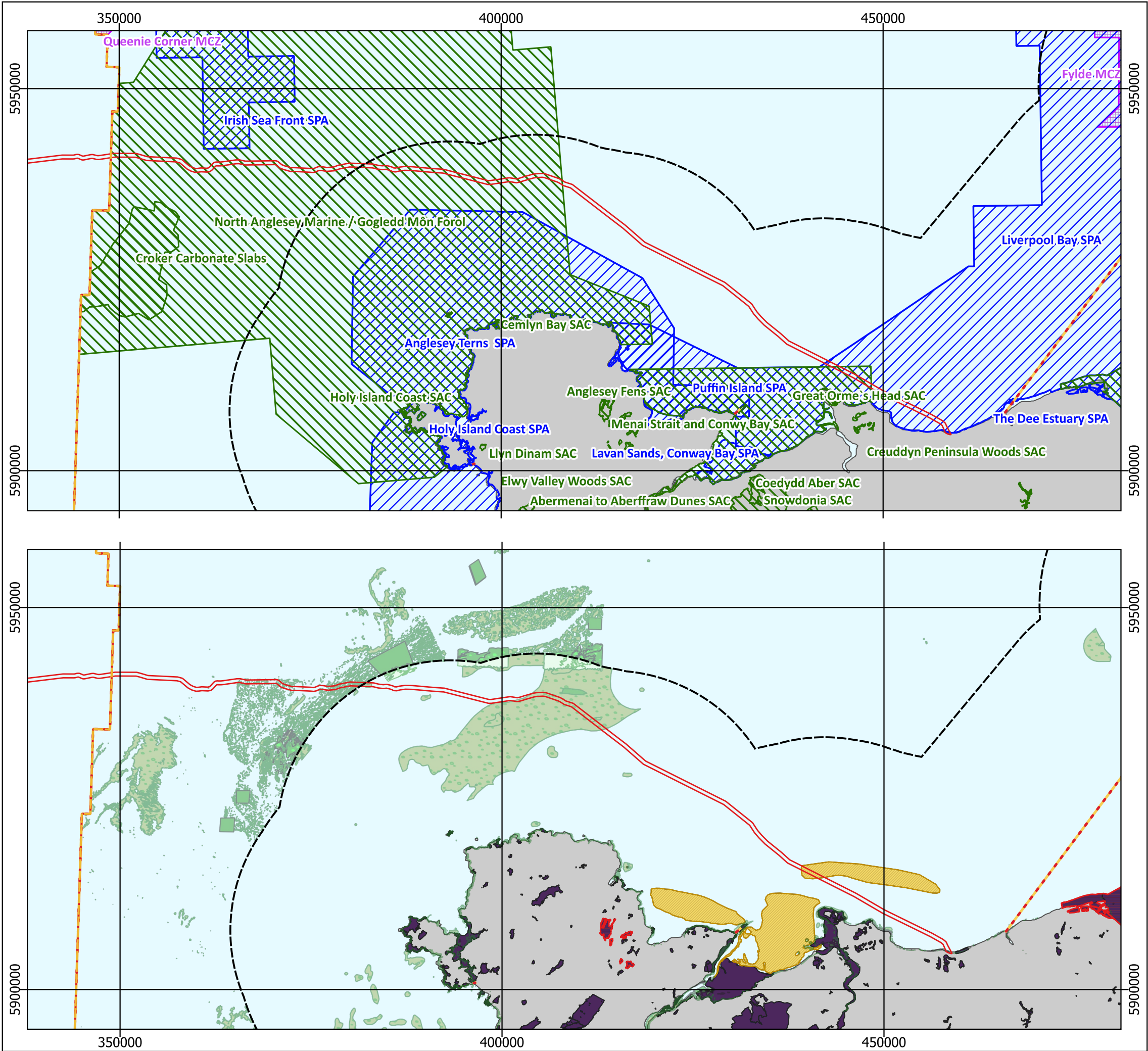
- Reefs (EUNIS habitat A4.2; JNCC biotope CR.MCR) - This complex includes polychaete reefs, bivalve reefs (e.g. mussel beds) and cold water coral reefs. The JNCC Annex I reef dataset shows areas of both biogenic (honeycomb worm (*Sabellaria alveolata*) and mussel beds) and bedrock/stony reef; and
- Sandbanks which are slightly covered by sea water all the time, including Constable Bank (EUNIS habitat A5.2; JNCC biotope SS.SSa).

49. Both habitats are designating features of the Y Fenai a Bae Conwy / Menai Strait and Conwy Bay SAC.

50. More than 28 cetacean species have been recorded in UK waters of which 11 occur regularly. Within the Irish Sea, approximately 12 species have been recorded and therefore may be encountered along the marine cable route, at least on a seasonal basis. Harbour porpoise (*Phocoena phocoena*), bottlenose dolphin (*Tursiops truncatus*), grey seal (*Halichoerus grypus*), common/harbour seal (*Phoca vitulina*) and otter (*Lutra lutra*) are listed under Annex II of the Habitats Directive, which lists species whose conservation requires designation of SACs. These cetaceans, along with the leatherback turtle (*Dermochelys coriacea*), are listed as Section 7 Priority Species under the Environment (Wales) Act 2016, which defines species of principal importance for the purpose of maintaining and enhancing biodiversity in Wales.

51. Harbour porpoise (*P. phocoena*) is the designated feature of the North Anglesey Marine / Gogledd Môn Forol SAC. It is therefore likely that the species will be encountered along the marine cable corridor.

52. Liverpool Bay SPA is designated for breeding little tern (*Sternula albifrons*) and common tern (*Sterna hirundo*) and non-breeding -red-throated diver (*Gavia stellata*), little gull (*Hydrocoloeus minutus*), common scoter (*Melanitta nigra*) and a waterbird assemblage.



MARESCONNECT INTERCONNECTOR

EIA SCREENING

PROTECTED SITES

Environmental Designations

Drawing No: P2673-PROT-005

A

Legend

12nm Territorial Sea Limit

Exclusive Economic Zone Limit

Maresconnect Cable Route

Annex I Reef

Bedrock

Stony

Bedrock and/or Stony

Biogenic

Biogenic and/or Bedrock/Stony

Protected Sandbank

High

Potential

Environmental Designations

SAC

SPA

RAMSAR

MCZ

SSSI

N

NOT TO BE USED FOR NAVIGATION

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WKID	EPSG:32630
Scale @A3	1:500,000
Data Sources	GEBCO; JNCC; NE; Marine Regions; MaresConnect; NRW
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Created By	Eloise Boblin
Reviewed By	Adam Johns
Approved By	Emma Langley

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4 Assessment of Likely Significant Effects and proposed mitigation

4.1 Marine Environmental Assessment

53. The Welsh Offshore Scheme is not Schedule 1 or Schedule 2 development and so not EIA development however, the project is committed to completing appropriate environmental assessment and as such will conduct a non-statutory MEA for the Welsh Offshore Works. This will accompany the Marine Licence application submitted to NRW and will propose all relevant impacts the project may have on the environment, as detailed in the Scoping Report (Intertek Metoc, 2026), and the approach taken for the assessment of each impact.
54. An informal Scoping Opinion has been requested from the below organisations in February 2026, all of whom have been identified as having an interest in the project area. The non-statutory MEA will incorporate any informal scoping responses.
 - Joint Nature Conservation Committee (JNCC)
 - Natural Resources Wales Statutory Authority and Marine Licensing Team
 - Centre for Environment, Fisheries and Aquaculture Science (Cefas)
 - Royal Society for the Protection of Birds (RSPB)
 - National Federation of Fishermen's Organisations (NFFO)
 - Trinity House
 - Maritime and Coastguard Agency (MCA)
 - Royal Yachting Association (RYA)
 - Ministry of Defence (MoD)
 - Department for Transport (DfT)
 - Transport Policy, Planning and Partnerships
 - Flood and Coastal Risk Management Branch
 - The Crown Estate (TCE)
 - Conwy County Borough Council
 - Gwynedd Archaeological Trust
 - Local Harbour Authority
 - Local Authority for landing site – Biodiversity
 - Local Authority for landing site - Planning
 - Royal Commission on the Ancient and Historical Monuments of Wales
 - Cadw
 - Welsh Marine and Fisheries Division
 - Welsh Fishermen's Association-Cymdeithas Pysgotwyr Cymru (WFA-CPC)
 - Chamber of Shipping
 - UK Hydrographic Office (UKHO)
2. The potential ecological, navigational and commercial fisheries impacts are summarised in the sub-sections below. Other impacts which will be considered in the MEA include:
 - Changes to sediment regime and coastal processes
 - Disturbance of natural seabed sediments
 - Disturbance of contaminated sediments
 - Change in water / sediment quality
 - Direct impact to archaeological asset

- Indirect impact to archaeological asset

4.2 Ecological impacts

55. To determine if the Welsh Offshore Scheme is likely to have a significant effect on any European site or protected species, either individually or in-combination with other plans or projects, a Habitats Regulations Assessment (HRA) Screening assessment will be carried out and submitted to NRW during the Marine Licence application.
56. The Welsh Offshore Scheme is not Schedule 1 or Schedule 2 development and so not EIA development however, a non-statutory MEA will also be undertaken for the Welsh Offshore Scheme. This will accompany the Marine Licence application.
57. Potential impact pathways expected to be assessed in the non-statutory MEA for installation, operation, maintenance, and eventual decommissioning are described below. These will also be assessed in the HRA screening assessment (and report to inform an Appropriate Assessment (AA), if required), where relevant the following will be assessed in the MEA and HRA:
 - Visual disturbance
 - Above water noise
 - Toxic effects from the unplanned release of hydrocarbons or chemicals
 - Introduction or spread of Invasive Non-indigenous Species (INS)
 - Temporary habitat loss
 - Permanent habitat loss
 - Disturbance of natural seabed sediments
 - Disturbance of contaminated sediments
 - Physical disturbance of mobile species
 - Underwater noise changes
 - Collision below the water
 - Electromagnetic changes
58. The majority of environmental potential impact pathways from cable installation are expected to be temporary and transient. For example, temporary disturbance of seabirds through the presence of project vessels, temporary increases in suspended sediment levels associated with installation activities. However, there is the potential that the project could have a likely significant effect Annex I reef habitat in the region, either through installation activities or through the deposit of rock berm on top of habitat, resulting in a permanent loss of habitat. Any potential impacts on reef habitat will be minimised through cable route design. The extent of sensitive habitats has been delineated to allow for micro-routeing the cables in future. NRW have been consulted during and after the proposed marine surveys to ensure that they are aware of the types of habitats, the amount of biodiverse reef present and options to micro-route the cables. Further mitigation may be proposed in the MEA if necessary, such as seasonal restrictions in sensitive and protected areas. MaresConnect will provide all necessary information in the non-statutory MEA and the report to inform an AA, if required, to allow NRW to undertake an Appropriate Assessment under the Habitats Regulations.

4.3 Navigational impacts

59. The following impacts will be assessed in the non-statutory MEA:
 - Displacement of vessels

- Reduction in water depth
 - Risk of ship collisions
 - Accidental anchoring or emergency anchoring on unburied / buried cable
 - Blocking of navigational features
 - Electromagnetic Fields (EMF) interference with navigation systems
60. There is potential for temporary disruption to shipping activity during installation of the cables. This will be managed as part of the normal engagement with all navigational stakeholders before and during all stages of installation.
3. A further consultee list is in development for shipping and navigation and will be supported by a Hazard Identification (HAZID) workshop.
61. Use of cable protection e.g. rock berms in water depths of less than 30m has the potential to reduce chart datum by more than 5%, which is the threshold currently advised by the MCA as acceptable. The MEA will consider whether cable protection (if proposed) has the potential to adversely affect the ability of vessels to navigate safely.
62. Anchor snagging risk on installed cables has been assessed as part of the shipping and navigation risk assessment. This risk can be effectively mitigated through suitable cable protection, burial to appropriate depths taking into account seabed characteristics, and the inclusion of the 'as-laid' cables on Admiralty charts.

4.4 Commercial fishing impacts

63. The following impacts will be assessed in the non-statutory MEA:
- Temporary disturbance to fishing activity (e.g. displacement and loss of access)
 - Loss or damage of fishing grounds
 - Contamination of fish stock
 - Snagging resulting from obstructions on the seabed
64. There is the potential for temporary disruption of fishing activity during installation of the cables. Certain project activities have the potential to create temporary and permanent obstructions on the seabed. The introduction of new obstructions (e.g. rock berms if required) has the potential to increase the risk of gear snagging.
65. Consultation with local fishermen has been continued throughout the route development process and survey. A Fisheries Liaison Officer (FLO) was engaged during the marine surveys. The FLO produced and disseminated Notice to Mariners, informing the fishing industry of the status of the project and marine survey works. A FLO will be engaged during cable installation works. Guard vessels may be used if a specific risk is identified e.g. section of cable left temporarily unburied for a short time.
66. The MEA will assess whether EMF from the operational cables will affect crustaceans and elasmobranchs (species known to be sensitive to changes in EMF).

5 Ecological studies and surveys

67. The marine surveys were completed between February and August 2025 for the full marine route including geophysical, geotechnical and environmental intertidal and subtidal surveys.
68. A Marine Licence for the marine surveys, in Welsh Waters, was obtained in 2023, which covered all 15 route options to allow flexibility for the survey. Following further assessment and data made available prior to the survey in 2025, the route for survey was selected, with two potential landfalls, using a combination of the proposed route options to provide an optimum

route that avoided multiple constraints including sensitive habitats and geohazards.
69. A summary of the survey work undertaken is presented in Table 5-1 below.

Table 5-1: Marine Surveys Works Undertaken

Objective	Method	Specifications
Geophysical Detailed bathymetry, seabed features and shallow geology mapping for cable route engineering evaluation and environmental characterisation.	MBES, SSS, SBP	Nominal 500m wide corridor <1m target detection.
Target & crossings investigation Unidentified seabed anomaly characterisation and archaeological assessment. Confirmation of alignment and character of existing cables.	SSS, magnetometer, ROV	Target list graded by significance.
Seabed imagery Visual confirmation of biotope and seabed characterization.	Drop-down Video (DDV) camera	Still photographs and video footage acquired at each environmental sampling location.
Seabed sampling Environmental sampling for confirmation of biotope and seabed characterisation for environmental baseline mapping.	Environmental grab	Sampling locations selected from preliminary interpretation of SSS data, nominally 5km intervals.
Geotechnical Confirmation of geology to ground truth geophysical.	Vibrocore and cone penetrometer testing (CPT).	Sampling locations selected from preliminary interpretation of SSS data. Seabed visualized by camera before sample taken.

70. A Navigation Risk Assessment (NRA) has been completed including collation and analysis of site-specific shipping data.
71. Boreholes in the nearshore marine area may still be surveyed at a later date.
72. An archaeological desk-based study has been completed along with a review of marine survey data. An archaeological walkover survey at the landfall has also been undertaken.
73. MaresConnect has undertaken a desk-based Fishing Activity Study for the marine cable

corridor. This report combines the findings of an assessment of official fisheries landings data with findings of stakeholder engagement meetings held with key representatives of the commercial fishing industry. It identifies key areas for fishing activity along the proposed cable corridor and species targeted by both commercial and recreational fishing.

6 Other project applications

74. The primary and sole license required by the project to install the marine cables in Wales will be a Marine Licence from NRW.
75. In Ireland, the Offshore Ireland Scheme MaresConnect will be subject to Ireland's maritime consenting regime under the Maritime Area Planning Act 2021. This will require a Maritime Area Consent (MAC) from the Maritime Area Regulatory Authority (MARA), which provides the right to occupy the seabed and is a prerequisite to further applications. Development permission will then be sought from An Coimisiún Pleanála, and an EIA and AA will be undertaken, if required. In addition, a Maritime Usage Licence (MUL) from MARA will be required to authorise installation and operational activities associated with the subsea cables.
76. For the Onshore Wales Scheme and terrestrial elements of the Welsh project the primary consents in Wales will be obtained from Denbighshire County Council and Conwy County Borough Council. The councils have been consulted and are aware of the details of the onshore scheme. MCL anticipate that the onshore elements of the project will also be considered a non-EIA development.
77. The Onshore Irish Scheme and Offshore Irish Scheme will be combined into one document and submitted to ACP.

7 Conclusions

78. A range of potential impact pathways have been identified including underwater noise, sediment disturbance, and electromagnetic effects. However, most impacts from cable installation are anticipated to be temporary and short-lived. The main potential long-term impact relates to possible habitat loss, particularly to Annex I reef habitats, though this will be assessed further in the non-statutory MEA and minimised through careful route design and mitigation measures developed in consultation with NRW. These potential impact pathways do not necessitate an EIA, as the Welsh Offshore Scheme is not Schedule 1 or Schedule 2 development and so not EIA development. They will, however, be assessed further in the non-statutory MEA.
79. Potential disruptions to shipping and fishing activities during installation are recognised but will be managed through stakeholder engagement, risk assessments, and established mitigation measures, including cable burial, protection, and communication with marine users. These potential disruptions do not necessitate an EIA, as the Welsh Offshore Scheme is not Schedule 1 or Schedule 2 development and so not EIA development. They will, however, be assessed further in the non-statutory MEA.
80. The proposed works are not of a type listed on Schedule A1 and A2 of the Regulations, however MCL will submit a non-statutory Marine Environmental Assessment (MEA) for the project.

References

- BEIS & DESNZ (2022). Electricity Interconnectors in the UK since 2010. Energy Trends Special Article, June 2022. [online] Available at: https://assets.publishing.service.gov.uk/media/62bb2816d3bf7f662753cfa8/Electricity_interconnectors_in_the_UK_since_2010.pdf [assets.publishing.service.gov.uk]
- DESNZ (2025). Next Steps for Electricity Interconnection in Great Britain. [online] Available at: <https://www.gov.uk/government/publications/next-steps-for-electricity-interconnection-in-great-britain> [gov.uk] [Accessed June 2026].
- European Investment Bank. (2022). CELTIC INTERCONNECTOR. [online] Available at: <https://www.eib.org/en/projects/all/20180149>. [Accessed June 2026]
- Foresight (2026). Bridging Nations: MaresConnect on track to power 570,000 homes across the UK & Ireland. [online] Available at: <https://foresight.group/news-insights/insights/2025/bridging-nations-maresconnect-on-track-to-power-570-000-homes-across-the-uk-ireland/> [Accessed June 2026].
- HM Government (2020). Energy White Paper: Powering our Net Zero Future. Department for Business, Energy and Industrial Strategy.
- Intertek Metoc (2026). MaresConnect Interconnector Scoping Report. Report Number: P2673_R6754_Rev3. February 2026.
- Ofgem (2024). Empowering Great Britain for a clean and flexible energy future with the next generation of interconnectors. Press release, November 2024. [online] Available at: <https://www.ofgem.gov.uk/check-if-energy-price-cap-affects-you> [ofgem.gov.uk] [Accessed June 2026].
- IIEA (2020). Data Centre's in Ireland: The State of Play | IIEA. [online] Available at: <https://www.iiea.com/blog/data-centres-in-ireland-the-state-of-play>. [Accessed June 2026]
- SEAI (2019). Ireland's energy targets. [online] Sustainable Energy Authority of Ireland. Available at: <https://www.seai.ie/about/irelands-energy-targets>. [Accessed June 2026].
- WSP (2025). MaresConnect - Wales Converter Station and Landfall Optioneering Report March 2025 Site Visit Outcomes Technical Report Rev1.