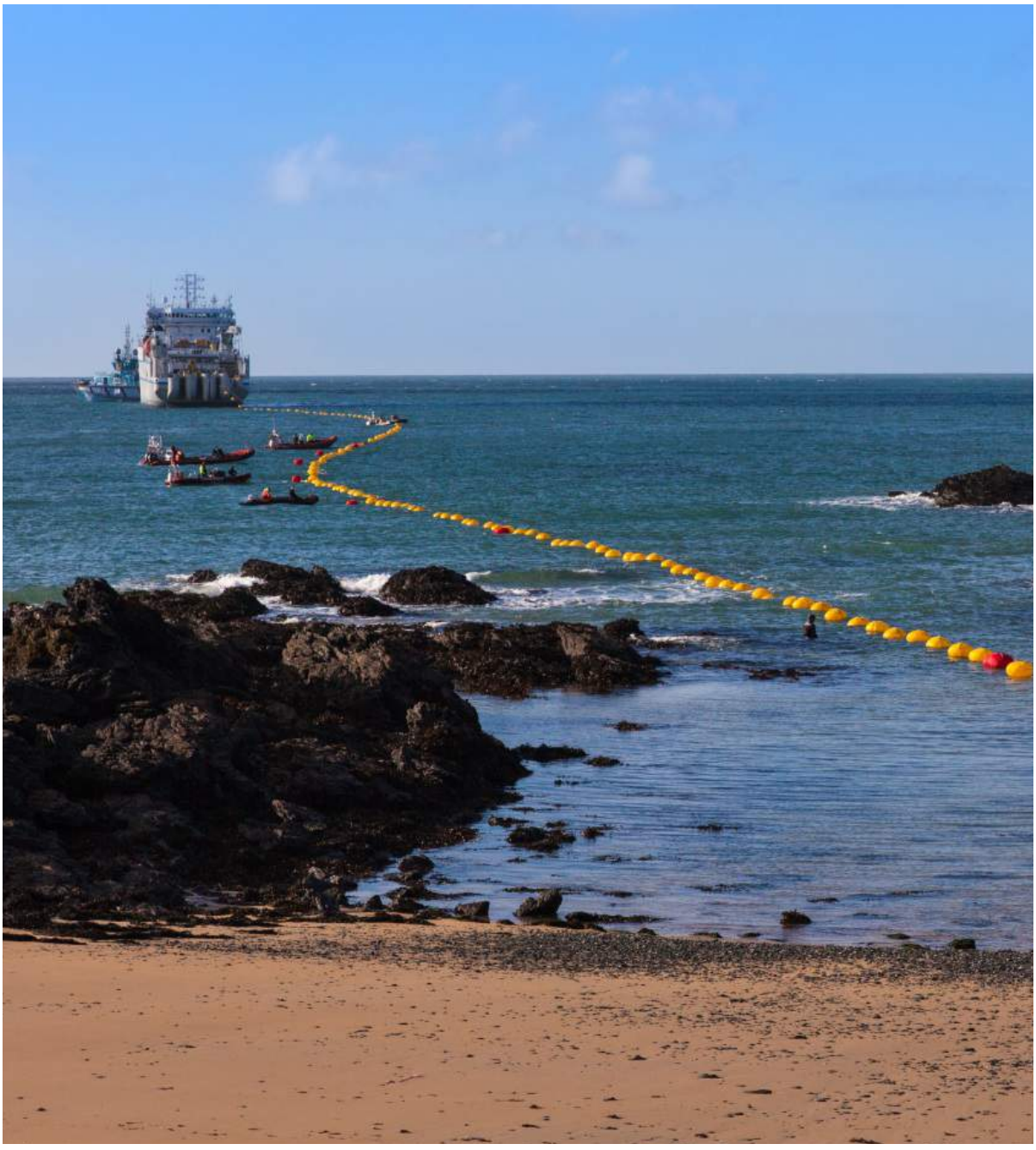
.GREENLINK

GREENLINK INTERCONNECTOR

CONCEPT OF PUBLIC PARTICIPATION (WALES)



GREENLINK CPP WALES REV1| 05/10/2018

GREENLINK

Greenlink Interconnector Ltd, South Bank House, Barrow Street, Dublin 4, Ireland

Contents

1. INTRODUCTION

The Greenlink Interconnector project (**Greenlink**) has been designated as a Project of Common Interest (PCI) under European Regulation 347/2013 (the **TEN-E Regulation**) and as such the application has to be accompanied by a Concept of Public Participation to ensure that consultation with the public is of an appropriate standard, and is meaningful and central to the development of the PCI project.

This document is the Concept of Public Participation for the purposes of the TEN-E Regulation and this Concept of Public Participation complies with the principles in Annex VI (4) of the TEN-E Regulation and with the guidance in the DECC Manual of Procedures

The relevant European and Welsh guidelines can be found in Appendices 1 and 2.

This document will provide an introduction to Greenlink and outline the public consultation strategy to be undertaken during the development process in Wales.

The public consultation strategy aims to ensure that the public has visibility of the Greenlink proposal as it develops and input into the project as it evolves.

1.1 PROJECT OVERVIEW

Greenlink Interconnector Ltd (**GIL**) is proposing to develop, Greenlink, an electricity interconnector linking the existing electricity grids in the UK and Ireland. Greenlink will consist of two converter stations, one to be located close to the existing substation at Great Island in County Wexford (Ireland) and one close to the existing substation at Pembroke in Pembrokeshire (Wales). The converter stations will be connected to each other onshore by underground cables and offshore by subsea cables across the Irish Sea.

GIL was awarded an Interconnector Licence in GB by Ofgem on 10th February 2015 and was also awarded Initial Project Assessment (IPA) Status under Ofgem's Cap and Floor Regime on 30th September 2015.

Greenlink is designated as a European Union PCI (PCI project number 1.9.1) under the provisions of European Union Regulation No. 347/2013 on guidelines for Trans-European Network for Energy (TEN-E Regulations) and has successfully applied for funding under the Connecting Europe Facility (CEF).

A plan showing the marine cable routes and onshore infrastructure can be found in Appendices 3 and 4.

1.1.1 MARINE CABLE ROUTE

The marine cable route development has been an iterative process involving consultation and refinement and is being designed to incorporate environmental and technical constraints. The final route, method of installation and method of protection will be informed by the conclusion of subsea surveys.

The marine cable route falls within the jurisdiction of Natural Resources Wales (NRW) (Marine Licence) and Milford Haven Port Authority (MHPA) (Marine Works Licence).

The marine cable route options under consideration are shown in Appendix 3.

1.1.2 LANDFALL

The land cables will be connected to the marine cables in a transition jointing bay (TJB) buried in the ground at the landfall site above the high-water mark. In all areas the cables will be buried in the ground. TJBs are typically 25m long x 5m wide and 3m deep below ground level.

Horizontal Directional Drilling (HDD) is the preferred method of installation at the landfall site. HDD is a technique whereby a hole is drilled from shore under any sea defences, cliffs, dune systems or sensitive features, to a point a suitable distance offshore, usually several hundred metres. A pipe is inserted into the drilled hole that is then used as a duct into which the cables are installed.

The Project aim is to utilize HDD from the landfall and to drill under the Broomhill Burrows SSSI sand dunes and emerge below the Mean Low Water Springs (MLWS) mark. Should this not be technically feasible and the cable emerges short of the MLWS mark in the intertidal, a trench will be excavated across the beach using conventional excavators (either on the shore or mounted on a shallow barge). Trenching would affect a maximum 10m wide strip of the intertidal area. Once the trench has been formed the cable will be installed from the cable lay vessel by a combination of floating and pulling the cable using a winch anchored behind the beach. On completion of works, the intertidal area will be restored to pre-construction conditions. Ground investigations are ongoing to confirm the technical details required to inform cable landfall design.

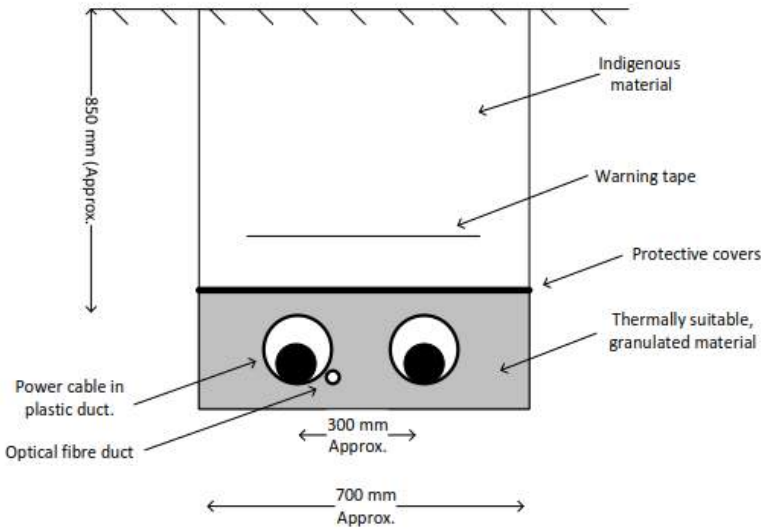
The landfall site falls within the jurisdiction of the Pembrokeshire Coast National Park Authority as the local planning authority.

The proposed landfall location is shown within the onshore infrastructure plan in Appendix 4.

1.1.3 HVDC CABLE ROUTE

The two HVDC onshore cables are likely to be buried underground in a single trench with a typical depth of cover of 850mm to 1000mm. These are usually installed in plastic duct to simplify the construction process. It is usual for the two ducts to be positioned close together (approximately 300mm). A protective cover and warning tape are also usually buried along with marker posts at regular intervals at ground level. This arrangement is shown in **Figure 1-1**.

Figure 1-1 **Typical Underground HVDC Arrangement**



It is usual to increase the depth of cover in agricultural land to around 1050mm (increase from 850mm). The width of the trench may also vary with depth of cover (the deeper the cables are buried the wider the trench may become).

A specific design would need to be engineered for utility crossings, crossing watercourses or other areas where the ordinary depth of cover cannot be achieved.

The underground HVDC cables will link the converter station to the connection point with the offshore cables, for a distance of approximately 7km. A number of cable route options have been considered, which comprised a mixture of cross-country and under-road options.

At present environmental information is being collated to inform the identification of a definitive cable route. A number of proposed options have been assessed through an options appraisal exercise, which highlighted environmental constraints as being fundamental to the alignment of the cable route. During this exercise, cable route alignments were refined to avoid proposed and existing developments and sensitive environmental features; e.g. historic environment features, waterbodies, woodlands, important habitats, etc. The results of the options appraisal enabled a comparison between the various options and will be taken further into account alongside other key issues such as landowner agreements and technical requirements. Each of the cable alignments built on the initial optioneering to avoid environmental features by aligning the route through existing field gaps (gates, existing breaks in hedgerows, etc.) where practicable.

The current preferred alignment represents a carefully located and practical alignment to avoid sensitive features whilst remaining inherently deliverable. From the landfall site, the cable route extends north to avoid the Broomhill Burrows SSSI, whilst maintaining spatial separation from the Devil's Quoit Burial Chamber Schedule Monument, before employing a short section of HDD to avoid impacting services within the B4320 and avoiding a potential bat-sensitive tree line southeast of Broomhill Cottage. Thereafter, the route extends eastwards across pasture north of the Broomhill Burrow SSSI before crossing agricultural fields south of Neath Farm and arcing northwards towards the road at Vine Cottage. The cables would then be embedded within the road and / or verge continuing east towards Wallaston Cross before progressing to the potential converter station

locations.

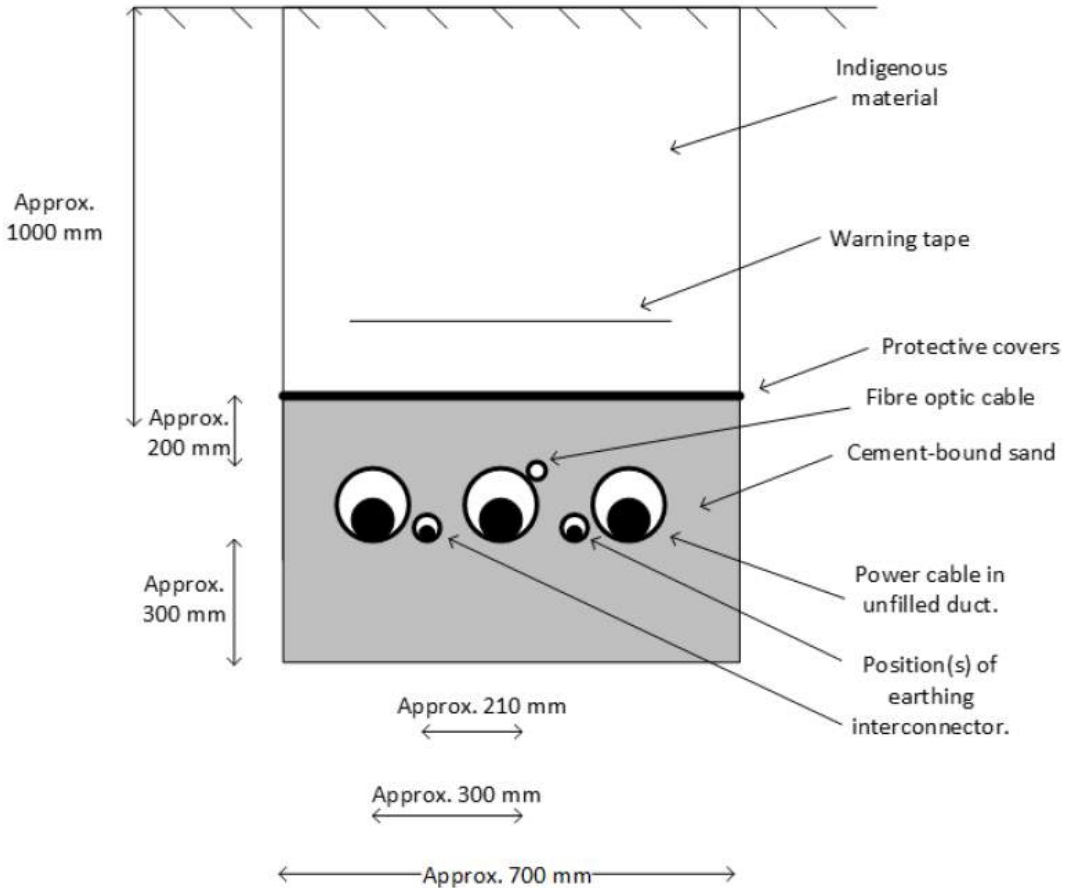
The HVDC cable route falls within the jurisdictions of both Pembrokeshire County Council and Pembrokeshire Coast National Park Authority.

The proposed cable route options are shown within the onshore infrastructure plan in Appendix 4.

1.1.4 HVAC CABLE

HVAC cables will connect the proposed converter stations to the existing electricity substations. It is likely that a similar arrangement would be used for the underground HVAC cables, as illustrated in **Figure 1-2** below. The width of the cable corridors will be subject to detailed design, and the section shown is typical, with trench widths likely to be in the range 700 to 900mm, with some sections over 1000mm.

Figure 1-2 **Typical Underground HVAC Arrangement**



It is usual to increase the depth of cover in agricultural land to around 1050mm (increase from 850mm). The width of the trench may also vary with depth of cover (the deeper the cables are buried the wider the trench may become).

A specific design would need to be engineered for utility crossings, crossing watercourses or other areas where the ordinary depth of cover cannot be achieved.

Further investigation is required to identify a preferred alignment for the HVAC cables from the converter station location but will likely connect to the east of the existing power station.

Indicative HVAC cable route options are shown within the onshore infrastructure plan in Appendix 4.

1.1.5 CONVERTER STATION

A converter station with a nominal rating of 500MW will typically have a footprint of approximately 185 metres by 100 metres (circa. 1.85 hectares) with the requirement for additional land take for access, landscaping and maintenance, etc. This footprint would allow for a converter station with a nominal rating of 500MW that will be connected to the Great Island converter station in Ireland via land and sea underground cables. An indicative design of the converter station components is included in Appendix C: Indicative Converter Station (Wales) Drawing. A converter station consists of various components. These include a converter hall, converter transformers, AC switchgear and busbars, harmonics filters, lightning towers, ancillary plant such as cooling bank and diesel generators, and a control building. Typically, the tallest components are the lightning towers at approximately 26 metres high and the converter hall, which could be up to 21 metres high at its apex. The converter hall and main building are usually one continuous building with height difference. The layout of the converter station, final dimensions and landscaping will depend on the local terrain, physical constraints, the results of environmental surveys, consultations and the supplier's technical requirements.

The potential converter station sites fall within the jurisdiction of Pembrokeshire County Council as the Local Planning Authority and will form the basis of the planning application.

Converter station sites under consideration are shown within the onshore infrastructure plan in Appendix 4.

1.2 THE DEVELOPER

Greenlink is being developed by GIL.

GIL is 100% owned by Element Power Holdings, a leading global developer of renewables, storage, flexible generation and interconnection projects. GIL is bringing private capital to the project and will assume the majority of the project risks. Element Power is an experienced international developer of energy infrastructure projects, with established teams of experienced engineers, environmental and financial professionals covering both the UK and Ireland.

For more information on Element Power, please visit our website: www.elpower.com

1.3 PROJECT NEED

The UK is currently connected to Ireland by two 'two-way' electricity interconnectors which provide a means of transferring electricity between the two countries – the East West Interconnector (EWIC), which connects County Dublin to North Wales, and an interconnector between Moyle, County Antrim, Northern Ireland and Ayrshire, Scotland. However, the challenges faced by the British, Irish and wider European energy systems are driving the need for additional interconnectors between the UK and Ireland and within Europe as a whole. There is strong support within Europe for additional interconnection.

The 'Energy Union' is a strategy launched by the European Commission on 25th February 2015 with the aim of ensuring that European countries have access to secure, affordable and climate-friendly energy. This strategy is driving a fundamental transition towards more innovative ways to produce, transport and consume energy, and towards different approaches in the design and implementation of energy policy.

A key aim of the strategy is to increase the physical interconnectedness of the energy grids (both gas and electricity) of European and neighbouring countries. This includes building more energy interconnectors between European countries, with the target of meeting a 10% interconnectedness by 2020 and to reach 15% by 2030.

An interconnected European energy grid is vital for Europe's energy security, for more competition in the internal market resulting in more competitive prices as well as for better achieving the decarbonisation and climate policy targets which the European Union has committed to. An interconnected grid will help deliver the ultimate goal of the Energy Union, i.e. to ensure affordable, secure and sustainable energy, and also growth and jobs across the EU.

Greenlink will have key strategic importance providing significant additional interconnection between the electricity grids of the UK, Ireland and mainland Europe. As well as the European level, Greenlink is also expected to provide benefits at the national level. For both the UK and Ireland it will provide additional transmission network capacities, reinforcing the existing electricity grids in south-east Ireland and south Wales, as well as contributing to each country's strategic interconnection objectives.

The construction of Greenlink will also deliver increased security of supply, by diversifying energy sources in both the UK and Ireland, and greater competition in the provision of electricity, ultimately providing significant benefits to consumers in the UK, Ireland and mainland Europe.

Greenlink's location in respect of the existing EWIC and Moyle interconnectors will also enable EirGrid and National Grid to increase the use of these connections to manage power flows on their networks, reduce network constraints and hence reduce costs of operating their transmission systems, benefitting consumers both in the UK and Ireland.

The main benefits of Greenlink are expected to be:

- Strategically placed to reinforce the transmission grid in the south of Wales by connection to Ireland, creating synergy with existing EWIC and Moyle interconnectors;

- Provides reinforcement to transmission boundaries in south Wales;
- Provides additional import and export capacity for the island of Ireland and the UK;
- Greater market integration; and
- Greater sharing of reserve, generation capacity and ancillary services between the UK and the island of Ireland.

2. CONSULTATION

Consultation is the process by which the input of various stakeholders is sought on matters affecting them. It is an important part of the development process. In the context of infrastructure development, its key goals are to increase transparency and a wider involvement in large-scale projects, by creating a dialogue with key stakeholders with the aim of improving these projects with stakeholder input.

Developers are responsible for ensuring public consultation forms a core part of their development projects and that the public has access to relevant information and can influence the decision-making process as appropriate. They must proactively engage the public in order to facilitate a meaningful and genuine consultation.

The Greenlink project team wants to ensure that the local community is consulted and involved throughout the development process of Greenlink. The consultation process will be tailored to the specific needs of the local community and delivered in a relevant and accessible manner.

Statutory consultation processes are carried out in addition to the public consultation outlined in this section. Details of statutory consultation can be found in section 3.

2.1 OUR APPROACH

GIL has ensured that this CoPP meets the requirements set out in Welsh Government TEN-E Guidance. This guidance document can be found in Appendix 2.

GIL recognises that any type of development can have varying degrees of impact and interest for local communities and is committed to promoting an open and honest dialogue with the local community throughout the development process.

GIL has sought to commence a public dialogue during the early stages of development, before detailed environmental work has been carried out. This will enable the local community to watch the project evolve and understand the various complexities and detailed studies involved in developing and constructing an interconnector.

By involving the local community throughout the development process and providing information as it becomes available, GIL will work to ensure that the local community is part of the development process for Greenlink.

GIL recognises:

1. the principles of the consultation process set out in Annex 6 of the TEN-E Regulation and will adhere to these principles in order to increase public participation in the consultation process and to ensure in advance that there will be a dialogue with the public and stakeholders;
2. that the NPPF identifies that early engagement has significant potential to improve the efficiency and effectiveness of the planning application system for all parties, and that good quality pre-application discussion enables better coordination between public and private resources and improved outcomes for the community. GIL's consultation;
3. that the UK Marine Policy Statement identifies that decisions should be taken after appropriate liaison with terrestrial planning authorities and other regulators, and in consultation with statutory and other advisors when appropriate.

These various regulations and elements of policy have helped to shape and inform GIL's approach to consultation, which is designed to ensure early engagement prior to the submission of the various applications for Greenlink.

2.2 IDENTIFICATION OF STAKEHOLDERS

A key part of planning any consultation is to identify the relevant key stakeholders. In addition to the statutory consultees, key stakeholders for Greenlink will include: community groups, local residents, local interest groups, constituency AMs and MPs, councillors and local media.

It is expected that the list of stakeholders will grow throughout the consultation process, as more groups and stakeholders become aware of the project. We will ensure that project information is provided to these groups in a timely and transparent manner.

GIL recognises that different stakeholders will have varying levels of interest in the project. To assist developing a meaningful consultation strategy stakeholders have been and will continue to be assigned a different 'engagement status', based on expected/perceived impacts and levels of interest in the project. Engagement status' are explained below:

- **Engagement Status 1** – must be informed and proactively engaged throughout, high level of interest expected
- **Engagement Status 2** – must be kept informed and engaged as per responses, medium level of interest expected
- **Engagement Status 3** – must be kept informed and engaged as per responses, low level of interest expected

2.2.1 ELECTED REPRESENTATIVES

A number of elected representatives have been, and will continue to be, consulted as part of the Greenlink consultation programme in Wales.

Relevant community councils and ward councillors from the local planning authority are key local stakeholders, directly representing local communities at the local political level.

Representatives from the following administrative boundaries are being included in the Greenlink consultation programme.

Elected representatives to be included within this document are as follows:

- Community / Town Councils;
- Local Authority – Ward Councils;
- Local Authority – Other Councillors; and
- Nationally Elected Representatives.

2.2.1.1 COMMUNITY / TOWN COUNCILS

Community and Town Councils are elected to represent the views of the local community and can make a valuable contribution towards shaping how a development progresses.

The following Community / Town Councils in Pembrokeshire have been and will continue to be consulted during the development.

Table 2-1 Priority Community / Town Councils for Consultation

Community / Town Council	Engagement Status	Notes
Angle Community Council	1	Relevant council for landfall, cable route and converter station
Pembroke Dock Community Council	2	Neighbouring council, with some properties having views over the potential converter station sites
Hundleton Community Council	2	Neighbouring council, potentially affected by construction traffic
Stackpole & Castlemartin Community Council	3	Neighbouring council, not expected to be affected but will have an interest in a major project taking place on the peninsula
Pembroke Town Council	3	Neighbouring council, not expected to be affected but will have an interest in a major project taking place on the peninsula

All these councils will be contacted directly and feedback on Greenlink and the level of consultation required will be sought. Consultation with their local residents will be shaped by the feedback we receive.

Figure 2-1 Community / Town Council Boundaries

2.2.1.2 LOCAL AUTHORITY - WARD COUNCILLORS

The relevant Local Planning Authorities for the region are Pembrokeshire County Council (PCC) and Pembrokeshire Coast National Park Authority (PCNPA). GIL believes that it is important that councillors and PCNPA members have access to accurate project information and a clear point of contact within the project team to raise queries and make suggestions regarding the development of Greenlink.

The following wards of Pembrokeshire County Council will be consulted directly:

Table 2-2 Priority Ward Councillors for Consultation

Ward	Engagement Status	Notes
Hundleton	1	Relevant ward for landfall, cable route and converter station
Pembroke Dock: Pennar	2	Neighbouring ward, with some properties having views over the potential converter station sites
Pembroke Dock: Market	3	Neighbouring ward, not expected to be affected but will have an interest in a major project taking place on the peninsula
Pembroke Dock: Central	3	Neighbouring ward, not expected to be affected but will have an interest in a major project taking place on the peninsula
Pembroke Dock: Llannion	3	Neighbouring ward, not expected to be affected but will have an interest in a major project taking place on the peninsula
Pembroke: Monkton	3	Neighbouring ward, not expected to be affected but will have an interest in a major project taking place on the peninsula
Pembroke: St Mary North	3	Neighbouring ward, not expected to be affected but will have an interest in a major project taking place on the peninsula
Pembroke: St Mary South	3	Neighbouring ward, not expected to be affected but will have an interest in a major project taking place on the peninsula

All members of PCNPA will be consulted drectly.

Figure 2-2 Pembrokeshire County Council Ward Boundaries

2.2.1.3 LOCAL AUTHORITY – OTHER COUNCILLORS AND OFFICERS

While ward councillors are the councillors specifically elected to represent the interests of their constituents there are other councillors who will have an interest in how Greenlink progresses. Other councillors within Pembrokeshire County Council that may have an interest in Greenlink are likely to include those holding the following positions:

Table 2-3 Other Identified Councillors for Consultation

Position	Engagement Status	Notes
Cabinet Member for Economy, Tourism, Leisure and Culture	2	Likely interest in a major project being built locally
Cabinet Member for Planning and Infrastructure	2	Likely interest in a major project being built locally
Cabinet Member for Environment and Welsh	2	Likely interest in a major project being built locally

Position	Engagement Status	Notes
Language		
Leader of the Council	3	Likely interest in a major project being built locally
Deputy Leader of the Council	3	Likely interest in a major project being built locally
Chairman of the Council	3	Likely interest in a major project being built locally
Full Council	3	All Pembrokeshire Councillors are likely to have some interest in the proposal. Those not already engaged on a ward-relevant level could be kept informed of key developments and major milestones.

GIL will also consult the relevant council officers to ensure that the final proposal is of the highest standard. Council officers to be consulted will include *inter alia*:

- Planning Officers;
- Local Highway Authority Officers;
- Environmental Officers [Ecology, Access, Landscape, Environmental Health];
- Flood Risk and Land Drainage; and
- Urban Design Officers.

2.2.1.4 NATIONALLY ELECTED REPRESENTATIVES

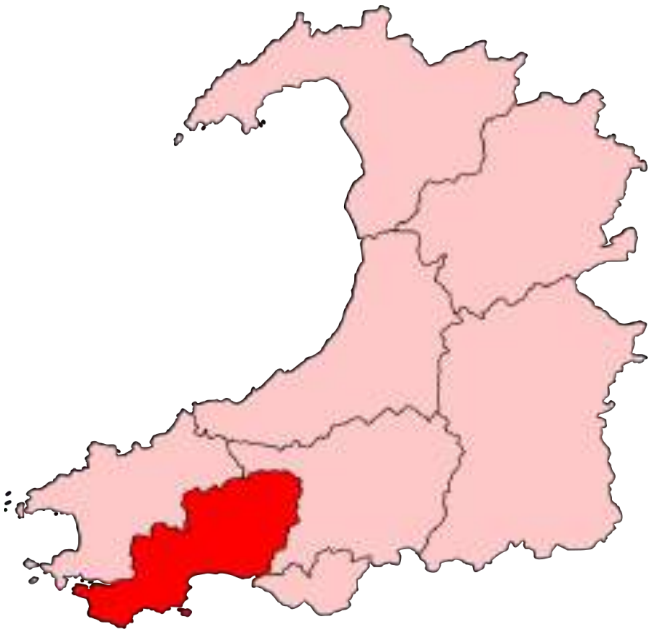
Greenlink is a major project offering national benefits and constituents will regularly look to their nationally elected representatives for guidance, support and advice. With this in mind elected representatives at the national level will also be consulted, with representatives from the following constituencies being included in the Greenlink consultation programme:

Table 2-4 Nationally Elected Representatives for Consultation

Constituency	Engagement Status	Notes
UK Parliament – Carmarthen West and South Pembrokeshire	1	Converter station, landfall site and cable route constituency Member of Parliament
National Assembly – Carmarthen West and South Pembrokeshire	1	Converter station, landfall site and cable route; constituency Assembly Member

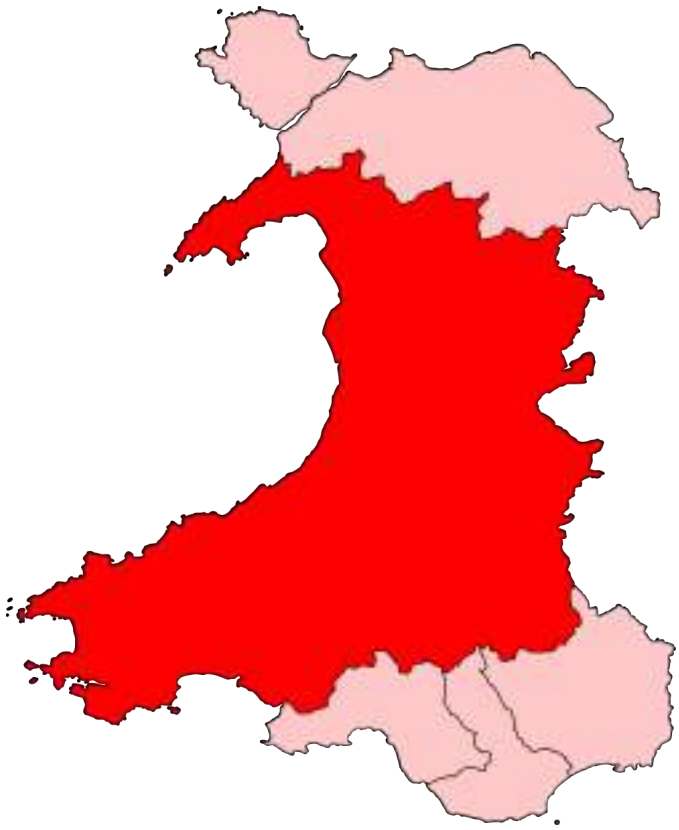
Constituency	Engagement Status	Notes
National Assembly – Mid and West Wales	2	Regional representative
National Assembly – Mid and West Wales	2	Regional representative
National Assembly – Mid and West Wales	2	Regional representative
National Assembly – Mid and West Wales	2	Regional representative
European Parliament - Wales	2	Regional representative
European Parliament - Wales	2	Regional representative
European Parliament - Wales	2	Regional representative
European Parliament - Wales	2	Regional representative

Figure 2-3 Carmarthen West and South Pembrokeshire constituency (National Assembly and UK Parliament)



Source: Wikipedia

Figure 2-4 Mid and West Wales Constituency (National Assembly)



Source: Wikipedia

2.2.2 NEIGHBOURING RESIDENTS

The input of neighbouring residents is considered to be vitally important by GIL. Residents living in the vicinity of the proposed converter station location, the landfall site and those living along the underground cable route (between the landfall site and the converter station site) will be consulted. Consultation is being carried out in the local area with information being made available to residents along the potential routes, landfall and converter station sites.

2.2.3 COMMERCIAL AND RECREATIONAL USERS

GIL recognises that there are numerous members of the local community who are commercial and / or recreational users of the area in which Greenlink is looking to install the cables and converter station. GIL is keen to understand any concerns arising from the project in respect of these users or potential opportunities available for consideration in project delivery. In order to fully assess potential impacts, GIL will seek views from local commercial and recreational users to understand the current baseline and identify the assessment and development work required to ensure that the project is designed to incorporate the interests of existing users.

Commercial / recreational users include:

- Tourism interest;
- Farmers;
- Fishermen;
- Anglers;
- Surfers; and
- Walkers.

This list is not exhaustive and further users are likely to be identified and consulted as the consultation progresses.

GIL asked residents to highlight local interest groups who should be consulted during the development process and no additional parties were identified.

2.3 SUBJECT AREAS

GIL will seek input into several key subject areas to incorporate into the development process moving forward and to ensure that the Greenlink proposal is being developed to the highest standard.

Subject areas to be consulted on will include:

- Environmental;
- Local supply chain;
- Logistics and construction programme; and
- Existing land use.

Further subject areas will be included as they arise during the consultation process.

2.3.1 ENVIRONMENTAL

As part of the project development process Environmental Scoping Reports will be sent out to relevant stakeholders for the Marine and Onshore components of the project. These reports outline the proposed scope and methodology of assessment and survey work to be carried out during the development of the project. The feedback from stakeholders is then incorporated into the survey and assessment programme.

The onshore environmental scope will include the follow topic areas:

- Introduction and Rationale;

- Description of the Project (Onshore Wales);
- Alternatives Considered;
- Legislative and Planning Context;
- Approach to Environmental Assessment;
- Population and Human Health;
- Biodiversity;
- Historic Environment;
- Landscape and Visual Impact;
- Water: Hydrology, Flooding and Surface Water Quality;
- Soils, Geology and Hydrogeology;
- Noise and Vibration;
- Traffic and Transport;
- Land Use;
- Air Quality and Climate Change;
- Material Assets, Major Accidents and Disasters;
- Electromagnetic Fields; and
- Cumulative and Transboundary Effects.

The Marine Scoping Report was issued to key stakeholders, including:

- Natural Resources Wales;
- Milford Haven Port Authority;
- Castlemartin Firing Range; and
- Local fishing interests

The marine environmental scope included the follow topic areas:

- Legislative Framework;
- Physical Environment;
- Biological Environment; and
- Human Environment.

Local stakeholders are included within the circulation of the Environmental Scoping Reports and GIL will seek an ongoing dialogue with all stakeholders throughout the development process. GIL will also seek to identify additional local environmental interest groups and additional specific environmental issues throughout the public consultation. GIL will seek to engage with these groups to ensure that the environmental work carried alongside the application is as robust as possible and considers all environmental issues and concerns raised.

As the design evolves GIL will be seeking feedback from the public on relevant changes, including the visual appearance of the converter station and the proposed landscaping and screening planting and will take such responses into consideration.

2.3.2 LOCAL SUPPLY CHAIN

The development of significant infrastructure entails substantial capital outlay from developers and their investors, the majority of which is spent during the construction period. Most of this outlay is spent purchasing equipment and materials (e.g. converter stations and subsea cables) with the rest mainly spent on contractors for the construction of the infrastructure. The construction works will be coordinated by one main contractor who will sub-contract various components to specialist companies, e.g. cable laying, pouring foundations, etc.

Construction work on the Greenlink Interconnector is expected to lead to notable expenditure in Wales. A significant amount of work is due to take place at the landfall, cable and converter station sites will require skills and experience available from contractors found in the local area.

The types of services that could be locally sourced include:

- Transportation – equipment and personnel;
- Materials - e.g. supplying and pouring concrete;
- Electrical connection;
- Civil engineering activities and earthworks: e.g. tracks and hard-standing, foundations, trench digging for cables, etc.;
- Hospitality and catering;
- Office and cleaning supplies;
- Site services, e.g. portacabins and portaloos;
- Site security;
- Fencing; and
- Waste disposal.

GIL is committed to maximising the use of locally-based contractors and personnel during the construction and operational phases of the project. As a part of this we will work to engage with local suppliers during the consultation programme and liaise with local economic bodies to ensure that a dialogue is established with local businesses.

2.3.3 LOGISITICS AND CONSTRUCTION PROGRAMME

The construction phase of a major project includes numerous vehicle movements including workers travelling to site and equipment and material deliveries. A Transport Impact Statement / Assessment will be completed as part of the planning application and GIL will seek input on potential issues of road safety and traffic disruption with the aim of minimising local impacts.

Installation of the underground cables also has the potential to cause disruption and GIL will seek to work with the local community to develop a programme to minimise any impacts.

2.3.4 EXISTING LAND USE

GIL is keen to avoid any negative impacts on existing users of the local land and marine locations where the project is proposed to be located. GIL will seek to build a thorough understanding of the current commercial and recreational users of the sites and develop and maintain a dialogue with them to ensure that their interests are incorporated into the design and construction programme as the development progresses.

2.4 CONSULTATION TOOLS TO BE USED

GIL will use a variety of consultation tools throughout the consultation programme. The precise deployment of the tools will reflect the requirements of stakeholders and feedback as the consultation progresses. Consultation tools will include:

- Project information leaflet (as required by Annex VI(5)(a) of the TEN-E Regulation);
- Project website (as required by Article 9(7) of the TEN-E Regulation);
- Public exhibitions;
- Community/Town council meetings and presentations;
- One-to-one engagement with stakeholders;
- Roundtable meetings;
- House visits; and
- Local medias.

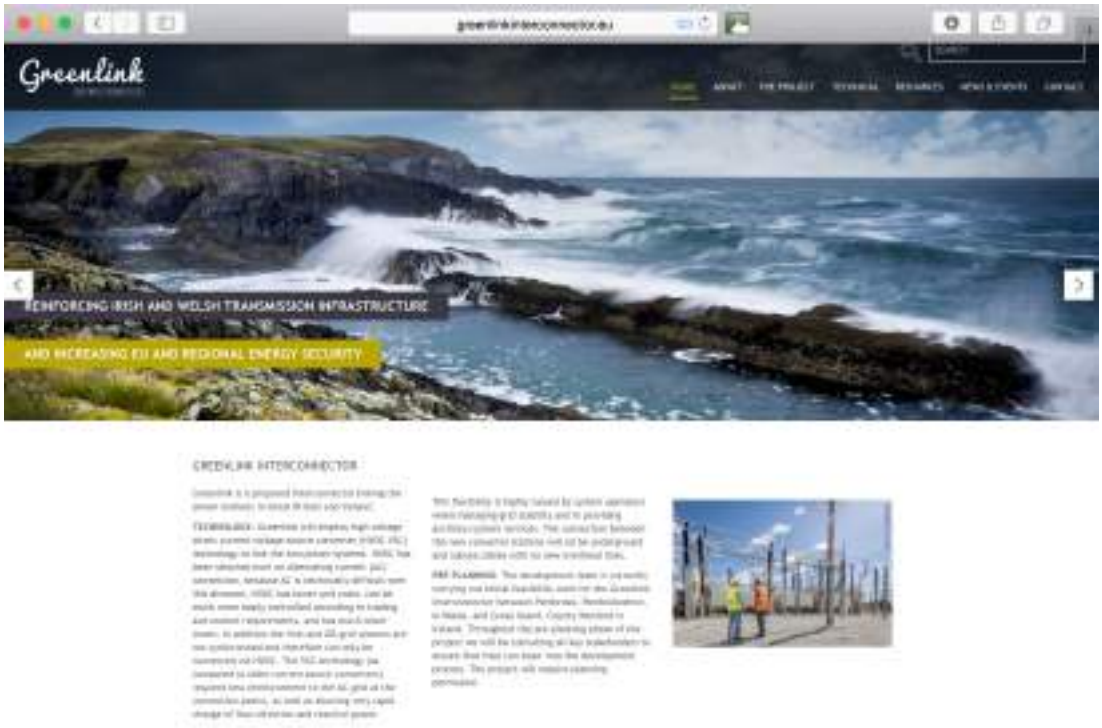
2.4.1 PROJECT BROCHURE – INFORMATION LEAFLET

In accordance with the TEN-E Regulation and the PCI guidance GIL has produced a leaflet of less than 15 pages to provide a summary of the project timetable, studies, route options, opportunities, project evolution and possible project mitigation measures. This will be made available to all stakeholders in hard format and also be published on the project website. A copy of the project brochure can be found in Appendix 5.

2.4.2 PROJECT WEBSITE

In accordance with the TEN-E Regulation and the PCI guidance, a dedicated project website has been published – www.greenlinkinterconnector.eu. The website offers stakeholders key project information and the latest development news. The website will play a central role in the consultation plan, as it provides all key project information in one accessible location and creates a basis for discussion between different stakeholders. Regular communication via the project website will help

boost awareness and transparency among stakeholders.



2.4.3 PUBLIC EXHIBITIONS

Public exhibitions will take place at key stages of the development programme to present the latest details of the project and enable members of the local community to meet the project team in person. Project information will be provided via a range of media – exhibition boards, leaflets and third-party materials.

Events will be held in public locations convenient for the local community and will be publicised locally. Details of the public exhibitions held to date can be found in section 2.5.2. Exhibition boards displayed at the public exhibitions can be found in Appendix 6.

2.4.4 COMMUNITY / TOWN COUNCIL MEETINGS AND PRESENTATIONS

Community and Town Councils may want an introductory meeting, general meeting or a meeting on a specific issue. GIL will seek to accommodate this when appropriate, and aim to be accompanied by a relevant expert on a specific topic as required.

2.4.5 ONE-TO-ONE ENGAGEMENT

One-to-one engagement will be used to discuss specific areas of concern with participating parties. These meetings will be particularly useful for focused discussions with leaders of local stakeholder groups in the planning and permitting stages of development. All stakeholders will be invited in writing to public exhibitions and will be invited to discuss any concerns through one to one engagement.

2.4.6 ROUNDTABLE MEETINGS

Roundtable meetings will allow formal discourse among a number of representatives from various stakeholder groups to discuss specific areas of the project and gain varied inputs.

2.4.7 HOUSE VISITS

Residents living near a proposed project often have a number of concerns pertaining to issues of residential amenity and other areas such as perceived impacts on health and house prices. Specific households may require additional consultation care due to perceived high impacts from a proposal.

Directly engaging with stakeholders via house visits is an ideal opportunity for both informational and participatory possibilities for communication.

2.4.8 LOCAL MEDIA

Local media will be kept informed of key project developments during the development process and become an additional source of information to raise awareness within the local community.

Table 2-5 Identified Local Media

Local Media	Engagement Status	Details
Pembroke & Pembroke Dock Observer	3	Local weekly
Pembrokeshire Herald	3	Local weekly
Western Telegraph	3	Regional paper

2.5 CONSULTATION TO DATE

Consultation to date has been undertaken with statutory consultees such as Natural Resources Wales; key stakeholders like Castlemartin Firing Range; Milford Haven Port Authority; Pembrokeshire County Council and Pembrokeshire Coast National Park Authority; and residents. Consultation with all consultees will continue throughout the development process.

The aim of this work is to understand existing environmental and technical constraints and identify opportunities and solutions to be incorporated into the final Greenlink proposal

Details of public consultation to date are outlined in this section.

2.5.1 WEBSITE

The www.greenlinkinterconnector.eu website was published on 21st April 2016. The website is outlined in Section 2.4.2. The website has resulted in a small number of enquiries to date.

2.5.2 RESIDENTS

GIL established a dialogue with a small number of interested residents in the area due to a previous mail drop carried out in support of Greenlink and Greenwire (a project featuring similar infrastructure) in September 2013. This letter went to all households in close proximity to the development. While no major concerns arose from the mail drop the point was consistently made that road safety was a concern during the construction phase in relation to speeding vehicles. Greenlink will incorporate this into the construction plan moving forward.

During the early stages of the project consultation centred on landowners and residents neighbouring Greenlink. Once an understanding had been developed of the environmental and technical constraints facing the project public consultations were held to seek wider input from residents.

Details of the first round of public consultations is shown below:

- **Pembroke Dock: 29th May 2018** – 14:00 to 20:00 - Pater Hall, Dimond Street, Pembroke Dock SA72 6DD
- **Hundleton: 30th May 2018** – 14:00 to 20:00 - Hundleton Sports Pavillion, Hundleton, Pembroke
- **Angle: 31st May 2018** – 14:00 to 20:00 - Angle Village Hall, Angle, Pembroke SA71 5AS

The project brochure and exhibition boards displayed at the public exhibitions can be found in Appendices 5 and 6.

GIL attended an Angle Community Council meeting on 4th July 2018 to discuss the project further and will continue to be available to attend such meetings. A copy of the presentation slides can be found in Appendix 7.

Details of the first round of public consultations in Ireland is shown below:

- **Fethard on Sea: 27th June 2018** – 16:00 to 20:00 – St Mary's Hall, Fethard on Sea, Co.Wexford
- **Duncannon: 15th August 2018** – 16:00 to 20:00 – Duncannon Parish Hall, Duncannon, Co.Wexford

Further public exhibitions are scheduled for November 2018, January 2019 and April 2019.

2.5.3 COMMERCIAL / RECREATIONAL USERS

GIL has attended a number Rural Steering Group meetings at the Castlemartin Firing Range. This meeting is attended by Pembrokeshire Coast National Park Authority, MoD representatives and Natural Resources Wales and provides a valuable insight into issues GIL needs to be aware of. GIL will continue to attend meetings and provide updates during the development process.

A dialogue has been established with Milford Haven Port Authority to ensure that the project takes shipping and ongoing activity in the Haven into consideration as the project evolves. This consultation has had a direct effect on the final choice of the landfall site.

GIL has appointed MarineSpace to work as Fisheries Liaison Officers to ensure that local fishing interests are aware of subsea surveys and the wider project.

GIL appreciates that there are a number of users that are yet to be consulted and will seek to establish a dialogue with all stakeholders as the formal public consultation and scoping phases commence.

2.6 RESOURCING

Members of the GIL development team have the expertise to engage and communicate with a variety of stakeholders on a range of development issues.

Consultation will be supported by GIL, Arup and Intertek.

Where appropriate, additional third-party consultants will be brought in to support the GIL team members, meaning GIL will have the support in place to allow the project team to cope flexibly with the peaks and troughs in consultation workload and to respond to topic specific issues.

2.7 CONSULTATION PROGRAMME

Table 2-6 **Details of full project life consultation activity**

Stage	Development Details	Consultation Details
Site development	A variety of technical and environmental assessments; commencement of the planning process: EIA screening, scoping and assessment.	With the commencement of the official planning process, community consultation kicks off, consultation on-going over the development period. The first round of public exhibitions commenced in May 2018. Further public exhibitions are scheduled for November 2018, January 2019 and April 2019.
Planning applications	Planning applications submitted for the relevant components of the	Stakeholders are fully aware of the content of the planning

Stage	Development Details	Consultation Details
	Greenlink project. In Wales, applications will be submitted to Pembrokeshire County Council and the Pembrokeshire Coast National Park Authority.	applications due to thorough consultation taking place prior to submission. GIL will continue a dialogue with stakeholders and respond to queries.
Determination	Planning applications are determined. In Wales, the applications will be determined by Pembrokeshire County Council and the Pembrokeshire Coast National Park Authority.	Stakeholders are informed of the planning decisions.
Post-planning	Pre-commencement planning conditions are discharged. Construction preparation takes place.	Community is engaged on key practical issues, such as traffic management plans and timing of works. GIL will work with stakeholders to discharge planning conditions.
Construction	Construction and installation works take place as per the agreed construction programme.	Community is kept informed of progress; project team responds to construction-related queries and issues.
Operational	The Greenlink project becomes operational.	Stakeholders are informed of the successful completion of the project and its operational status.

3. STATUTORY CONSULTATION

As part of the marine and onshore planning and permitting processes the public consultation, outlined in this document, is carried out alongside a statutory consultation process. During this process statutory consultees and the public are asked for their comments on the planning application.

GIL will seek input from statutory consultees throughout the development process to ensure that the final planning submissions are of the highest standard. This will include the route of formal environmental scoping and via an ongoing dialogue.

3.1 MARINE STATUTORY CONSULTEES

Natural Resources Wales (NRW) will consult the following statutory consultees, prior to determining the marine licence application:

- The Crown Estate
- MoD
- Local Biodiversity Officer (Pembrokeshire CC)
- Milford Haven and Pembroke Dock
- Fishguard Port (Stenaline)
- Royal Yachting Association
- Trinity House
- Maritime and Coastguard Agency
- Local Planning Authority Pembrokeshire CC
- Pembrokeshire Coast National Park Authority
- Royal Society For the Protection of Birds
- Welsh Government Fisheries/Marine Enforcement Officers
- Cadw
- Royal Commission on Historic Monuments Wales
- Marine Conservation Society
- The Wildlife Trust
- Chamber of Shipping
- NERL Safeguarding
- North Western and North Wales Sea Fisheries Committee
- Welsh Archaeological Trust
- JNCC

3.2 MARINE STATUTORY CONSULTATION

Prior to NRW awarding a marine licence they will require us to publicly advertise the application in a local newspaper and have it available for the public to read at the Pembroke Library. The public is given 42 days to make a representation. If after that we submit any additional information that NRW feel would be integral to the application they can ask us to advertise again for a further 42 days on the new information.

3.3 ONSHORE STATUTORY CONSULTEES

Pembrokeshire County Council and the Pembrokeshire Coast National Park Authority will consult the following:

- Natural Resources Wales.
- Cadw.
- Local Community Councils.
- Local Town Councils.
- Councillors, constituency AMs and MPs.
- Landowners and Occupiers of Adjacent Land.
- Dyfed Archaeological Trust.
- Specialist Consultees as required; e.g. Welsh Ministers, Health & Safety Executive, Coal Authority, etc.
- Relevant utilities; e.g. Dŵr Cymru Welsh Water, Western Power Distribution, National Grid, etc.

3.4 ONSHORE STATUTORY CONSULTATION

Pembrokeshire County Council and the Pembrokeshire Coast National Park Authority may consult with the statutory consultees listed above on the Environmental Impact Assessment (EIA) Scoping Report to determine the scope and level of detail required to support the Environmental Statement for the Onshore Wales elements of the Project.

During determination of the scope of the EIA, GIL will engage with the public via a second series of Public Consultation events, to be held in Pembroke Dock, Hundleton and Angle in November 2019. Dates for the second public consultation will be published via the Greenlink project website, radio advertisements, newspaper articles and notices in key community centres.

GIL will commence a formal Pre-Application Consultation (PAC) process with Pembrokeshire County Council and the Pembrokeshire Coast National Park Authority. The PAC process will include the preparation of a formal PAC Report, which will demonstrate that requisite consultation procedures have been met. Including: display of site notices at key locations for a minimum 28 day period; completion of a public engagement event, as described above, to present the Project to the public and allow any representations to be made for consideration prior to formal application and submission of notifications to: landowners, occupiers of adjoining land, councillors, town councils and community councils.

Planning submission will follow the pre-application process with formal submission of planning applications accompanied by an Environmental Statement. Pembrokeshire County Council and the Pembrokeshire Coast National Park Authority will consult the public, key stakeholders and statutory consultees on the submission material. Submitted documents will remain available through the Planning Authority websites and the Greenlink website (www.greenlinkinterconnector.eu) to enable a further opportunity to engage with the Project prior to a planning determination. GIL welcomes any representations by interested parties and encourages feedback via the 'Contact Us' page of the Greenlink website.

4. APPENDICES

4.1 APPENDIX 1 – EUROPEAN GUIDELINES

Source

REGULATION (EU) No 347/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:115:0039:0075:en:PDF

Article 9

Transparency and public participation

1. By 16 May 2014, the Member State or competent authority shall, where applicable in collaboration with other authorities concerned, publish a manual of procedures for the permit granting process applicable to projects of common interest. The manual shall be updated as necessary and made available to the public. The manual shall at least include the information specified in Annex VI.1. The manual shall not be legally binding, but it may refer to or quote relevant legal provisions. The manual is available at:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/311184/uk_manual_procedures_ten_e_regulation.pdf

2. Without prejudice to any requirements under the Aarhus and Espoo Conventions and relevant Union law, all parties involved in the permit granting process shall follow the principles for public participation set out in of Annex VI.3.

3. The project promoter shall, within an indicative period of three months of the start of the permit granting process pursuant to Article 10(1)(a), draw up and submit a concept for public participation to the competent authority, following the process outlined in the manual referred to in paragraph 1 and in line with the guidelines set out in Annex VI. The competent authority shall request modifications or approve the concept for public participation within three months; in so doing, the competent authority shall take into consideration any form of public participation and consultation that took place before the start of the permit granting process, to the extent that such public participation and consultation has fulfilled the requirements of this Article. Where the project promoter intends to make significant changes to an approved concept, it shall inform the competent authority thereof. In that case the competent authority may request modifications.

4. At least one public consultation shall be carried out by the project promoter, or, where required by national law, by the competent authority, before submission of the final and complete application file to the competent authority pursuant to Article 10(1)(a). This shall be without prejudice to any public consultation to be carried out after submission of the request for development consent according to Article 6(2) of Directive 2011/92/EU. The public consultation shall inform stakeholders referred to in Annex VI.3(a) about the project at an early stage and shall help to identify the most suitable location or trajectory and the relevant issues to be addressed in the application file. The minimum requirements applicable to this public consultation are specified in Annex VI.5. The project promoter shall prepare a report summarising the results of activities related to the participation of the public prior to the submission of the application file, including those activities that took place before the start of the permit granting process. The project promoter shall submit that report together with the application file to the competent authority. Due account shall be taken of these results in the comprehensive decision.

5. For projects crossing the border of two or more Member States, the public consultations pursuant to paragraph 4 in each of the Member States concerned shall take place within a period of no more than two months from the date on which the first public consultation started.

   a. For projects likely to have significant adverse cross-border impacts in one or more neighbouring Member States, where Article 7 of Directive 2011/92/EU and the Espoo Convention are applicable, the relevant information shall be made available to the competent authority of the neighbouring Member States. The competent authority of the neighbouring Member States shall indicate, in the notification process where appropriate, whether it, or any other authority concerned, wishes to participate in the relevant public consultation procedures.

   b. The project promoter, or, where national law so provides, the competent authority, shall establish and regularly update a website with relevant information about the project of common interest which shall be linked to the Commission website and which shall meet the requirements specified in Annex VI.6. Commercially sensitive information shall be kept confidential. Project promoters shall also publish relevant information by other appropriate information means to which the public has open access.

ANNEX VI

GUIDELINES FOR TRANSPARENCY AND PUBLIC PARTICIPATION

The manual of procedures referred to in Article 9(1) shall at least specify:

- the relevant law upon which decisions and opinions are based for the different types of relevant projects of common interest, including environmental law;
- the relevant decisions and opinions to be obtained;
- the names and contact details of the Competent Authority, other authorities and major stakeholders concerned;
- the work flow, outlining each stage in the process, including an indicative time frame and a concise overview of the decision-making process;
- information about the scope, structure and level of detail of documents to be submitted with the application for decisions, including a checklist;
- the stages and means for the general public to participate in the process.

The detailed schedule referred to in Article 10(4)(b) shall specify as a minimum the following:

the decisions and opinions to be obtained;
the authorities, stakeholders, and the public likely to be concerned;
the individual stages of the procedure and their duration;
major milestones to be accomplished and their deadlines in view of the comprehensive decision to be taken;
the resources planned by the authorities and possible additional resource needs.

- To increase public participation in the permit granting process and ensure in advance information and dialogue with the public, the following principles shall be applied:

  The stakeholders affected by a project of common interest, including relevant national, regional and local authorities, landowners and citizens living in the vicinity of the project, the general public and their associations, organisations or groups, shall be extensively informed and consulted at an early stage, when potential concerns by the public can still be taken into account and in an open and transparent manner. Where relevant, the competent authority shall actively support the activities undertaken by the project promoter.

Competent authorities shall ensure that public consultation procedures for projects of common interest are grouped together where possible. Each public consultation shall cover all subject matters relevant to the particular stage of the procedure, and one subject matter relevant to the particular stage of the procedure shall not be addressed in more than one public consultation; however, one public consultation may take place in more than one geographical location. The subject matters addressed by a public consultation shall be clearly indicated in the notification of the public consultation.
Comments and objections shall be admissible from the beginning of the public consultation until the expiry of the deadline only.

- The concept for public participation shall at least include information about:

the stakeholders concerned and addressed;
the measures envisaged, including proposed general locations and dates of dedicated meetings;
the timeline;
the human resources allocated to the respective tasks.

- In the context of the public consultation to be carried out before submission of the application file, the relevant parties shall at least:

publish an information leaflet of no more than 15 pages, giving, in a clear and concise manner, an overview of the purpose and preliminary timetable of the project, the national grid development plan, alternative routes considered, expected impacts, including of cross-border nature, and possible mitigation measures, which shall be published prior to the start of the consultation; The information leaflet shall furthermore list the web addresses of the transparency platform referred to in Article 18 and of the manual of procedures referred to in point (1);
inform all stakeholders affected about the project through the website referred to in Article 9(7) and other appropriate information means;
invite in written form relevant affected stakeholders to dedicated meetings, during which concerns shall be discussed.

- The project website shall make available as a minimum the following:

the information leaflet referred to in point (5);
a non-technical and regularly updated summary of no more than 50 pages reflecting the current status of the project and clearly indicating, in case of updates, changes to previous versions;
the project and public consultation planning, clearly indicating dates and locations for public consultations and hearings and the envisaged subject matters relevant for those hearings;
contact details in view of obtaining the full set of application documents;
contact details in view of conveying comments and objections during public consultations.

4.2 APPENDIX 2 – WELSH GOVERNMENT GUIDANCE DOCUMENT

Llywodraeth Cymru
Welsh Government

Trans-European Networks Energy (TEN-E)

Welsh Government Guidance

EU347/2013

Contents

This document is guidance specifically for Wales, and should be read after the UK Government's "Manual of Procedures: The permitting process for Projects of Common Interests in the UK". The UK Manual will provide you with information on the TEN-E Regulation which also need to be read in the first instance.

In accordance with Article 9(1) of the Regulation, this document is not legally binding.

 WG34551 Digital ISBN 978-1-78937-361-5

1 Definitions

The TEN-E Regulation introduces several terms that are not normally used in UK/ Welsh consenting regimes for energy infrastructure. These are described below:

Comprehensive Decision

The "comprehensive decision" is defined in Article 2(2) and Recital 33 to mean the decision or set of decisions that determines whether or not a project promoter is granted authorisation to construct a PCI. Although Member States may include decisions arising out of negotiations with individual landowners to grant access to, ownership of, or a right to occupy property within the comprehensive decision (see Recital 33), the UK Government has decided not to do this. The comprehensive decision will not therefore include e.g. Crown Estate leases, environmental permits or similar operational permits or commercial arrangements. Nor will it include decommissioning requirements[1]. However developers will need to comply with all relevant legislation on these issues.

Concept for Public Participation

The concept for public participation is a plan by the developer for consultation on the PCI. Annex VI.4 to the TEN-E Regulation sets out the minimum information that a concept for public participation should include. The concept is described in more detail in paragraph 4.23 of the UK Manual.

Draft application file

The "draft application file" is the collection of applications and associated information that is necessary for all required consents and permits that comprise the comprehensive decision. The TEN-E Regulation provides a 3-month period for the NCA to consider the draft and request any information that was specified by the NCA in the pre-application procedures but is missing from the file. Within 3 months of receipt of the draft, the NCA must either formally accept the file for examination or reject it.

National Competent Authority (NCA)

Under Article 8(1) of the Regulation, Member States are required to designate a "National Competent Authority" (NCA) that will co-ordinate and facilitate the comprehensive decision and provide a single point of contact for developers. For the UK, the designated NCA is the Secretary of State for Business, Energy and Industrial Strategy. Under Article 8(2) of the Regulation, to reflect and be consistent with Welsh devolution, the NCA has delegated its responsibilities as NCA for Project of Common Interests wholly within Wales, to the Welsh Ministers. In addition to referring to the delegation of those powers to the Welsh Ministers, in relation to practical or administrative matters, this guidance will also refer to the role of officials of the Welsh Government, who would carry out those functions on behalf of the Welsh Ministers.

The NCA responsibilities under the TEN-E Regulation as delegated by letter from the Secretary of State for Energy and Climate Change at the time, 28 April 2013, to Welsh Ministers are summarised as:

Responsibilities

- Ensure rapid treatment of PCIs (to the extent legally possible) (Article 7.2).
- Ensure IROPI decisions for PCI taken in Article 10(1) timescales.
- Co-ordinate the process for consenting and permitting for PCI applications.
- Act as sole point of contact for the project promoter (developer) in the process to issue the comprehensive decision and co-ordinate submission of all relevant documents and information.
- Facilitate issuing the comprehensive decision within Article 10(1) timescale, in line with the collaborative scheme under Article 8(3)(c).

Tasks

- Receive and assess notification of a project from a project promoter to determine whether to accept notification or reject it on the grounds that it is not mature enough to enter permitting process (Article 10.1(a)).
- Within 3 months notify the project promoter of the decision. If the notification is rejected, the NCA must provide written justification.

Project of Common Interest

A 'project of common interest' (PCI) is a project that is necessary to implement the energy infrastructure priority corridors and areas set out in Annex I to the TEN-E Regulation and which is included in a regional list drawn up by a Regional Group set out in Annex III.1 to the TEN-E Regulation.

PCIs are the transmission infrastructure linking two separate power systems or electricity markets. Their key feature is that they enable trading in a controlled fashion between the two systems or markets.

Project Promoter

A project promoter is defined under Article 2(6)(a) and (b) of the TEN-E Regulation as a Transmission System Operator (TSO), a distribution system operator (in Wales there are currently three, Scottish Power Energy Network (SPEN), Western Power Distribution and Wales and West Utilities), other operator or an investor, or – in defined circumstances – an entity with legal personality that is developing a PCI. In this Manual the project promoter is referred to as "the developer", however this guidance will refer to it as the project promoter.

Regional Groups

Regional groups should be established for the purpose of proposing and reviewing projects of common interest, leading to the establishment of regional lists of projects of common interest. In order to ensure broad consensus, these regional groups should ensure close cooperation between Member States, national regulatory authorities, project promoters and relevant stakeholders. The cooperation should rely as much as possible on existing regional cooperation structures of national regulatory authorities and TSOs and other structures established by the Member States and the Commission. In the context of this cooperation, national regulatory authorities should, when necessary, advise the regional groups, inter alia on the feasibility of the regulatory aspects of proposed projects and on the feasibility of the proposed timetable for regulatory approval.

The TEN-E Regulation (Annex III.1) establishes twelve Regional Groups ('Groups'). The membership of each Group shall be based on each priority corridor and area and their respective geographical coverage as set out in Annex I. Decision-making powers in the Groups shall be restricted to Member States and the Commission, who shall, for those purposes, be referred to as the decision-making body of the Groups.

2 Background

2.1 The purpose of this guidance is to provide specific information for PCIs as established by the Regulation on guidelines for trans-European energy infrastructure EU 347/2013 ("the TEN-E Regulation") located wholly in Wales (as mentioned in Paragraph 3.3 of the UK Manual of Procedures) and for which the Welsh Ministers have devolved consenting powers. The purpose of this guidance is to inform the project promoter where it needs to engage with the Welsh Government in relation to a PCI.

2.2 The TEN-E Regulation establishes that PCIs are necessary to take forward EU energy networks policy and ensures the most rapid consideration in the permitting process that is legally possible. The Regulation sets out guidelines for streamlining the permitting processes for major energy infrastructure projects that contribute to European energy networks and this will operate within the current statutory requirements in Wales. The regulation sets a timetable for decisions to be taken and ensure transparency by requiring consultation to take place. It is to ensure a streamlined permit-granting process for obtaining all of the consents and permissions required under domestic law for a PCI.

2.3 The TEN-E Regulation and the UK Manual should be read in conjunction with this guidance.

2.4 The UK Manual of Procedures[2] sets out practical guidance for PCI project promoters (developers) and the general public who wish to understand the process for determining consents for PCIs. It refers to the "permit granting process" when describing provisions of the TEN-E Regulation, but describes the necessary permissions and consents required for infrastructure in the UK as the "consenting process" or "consenting regime", to distinguish ordinary UK practice from the TEN-E Regulation provisions.

2.5 PCIs are projects which are considered to enhance the EU's energy infrastructure networks. BEIS' role as the National NCA is: (a) to act as the point of contact for the developer; (b) to co-ordinate obtaining the required permissions and facilitate providing the necessary information; and (c) to ensure that the comprehensive decision (the sum of those consents and permissions) is issued within a set timeframe.

2.6 The TEN-E Regulation applies to energy interconnectors[3] which would enhance Europe's energy infrastructure networks to allow energy to cross member state borders. These projects are referred to as PCIs.

2.7 A project will only become a PCI by firstly being identified by the European Network of Transmission System Operators in its periodic long-term development plans. The NCA has no responsibility for selection of projects of common interest.
www.ec.europa.eu/energy/en/topics/infrastructure/projects-common-interest

2.8 The NCA body is the Department for Business Economy, Industrial Strategy ("DBEIS"), however certain powers have been delegated to Welsh Ministers by the Secretary of State for Business, Energy and Industrial Strategy (see responsibilities and tasks under definitions). As some infrastructure projects fall within areas which are devolved to Wales, some of BEIS' functions as the NCA have been delegated to the Welsh Ministers.

2.9 The role of the Welsh Ministers as NCA is to act as sole point of contact for a PCI application in the process. This means that the Welsh Government will co-ordinate determination of consents necessary for the construction of the project by the relevant regulatory authorities within the timetable set by the TEN-E Regulation.

2.10 The delegation of NCA responsibilities was made according to the following principles:

(a) the role of NCA will be delegated to a devolved administration (DA) where both

(i) that part of the PCI which is in the UK is wholly within the national territory of that administration, an adjacent area of the UK territorial sea or an area of the UK continental shelf and

(ii) that devolved administration exercises all the relevant consenting functions.

(b) The role of the NCA will be delegated on a case-by-case basis where more than one UK administration exercises consenting functions in respect of the project.

2.11 In practice PCIs that fall within the criteria of principle (b) means that delegation of NCA responsibilities is likely to be to the DA that has principal responsibility for consenting the PCI or, if no substantive consent is required, to the DA that has the principal strategic interest in ensuring that the infrastructure is constructed.

2.12 The PCIs wholly or partly in Wales on the first Union List that fall within the category of infrastructure types to be delegated to the Welsh Ministers under principle (a) are given below.

Cluster connecting Ireland to United Kingdom, including one or more of the following PCIs:

1.9.1 Ireland — United Kingdom interconnection between Wexford (IE) and Pembroke, Wales (UK) [currently known as "Greenlink"]

2.13 There are no PCIs wholly or partly in Wales that fall within the category of infrastructure types to be delegated to the Welsh Ministers under principle (b).

2.14 The TEN-E Regulation requires PCI project promoters to undertake certain activities and these are discussed in the following relevant sections. The coloured boxes in this guidance is to enable project promoters to identify who is responsible for what processes.

3 Comprehensive Decision

3.1 The Welsh Ministers as NCA for cases located wholly in Wales, will co-ordinate and facilitate a comprehensive decision. As part of the comprehensive decision the consenting authority will carry out its usual functions.

3.2 The Welsh Ministers might in some instances be one of the consenting authority(ies) as well as the NCA as the Welsh Ministers could be responsible for taking decisions in relation to town and country planning i.e. planning applications and marine licencing.

3.3 The TEN-E regulation sets out specific periods for action to deliver the "comprehensive decision" in Article 10. These are split into two stages, the pre-application procedure and the permit granting procedures (explained below). The combined duration of these stages should not exceed three years and six months however, in certain circumstances it would be possible to extend the period.

3.4 To ensure rapid treatment, the TEN-E Regulation sets an overall timetable of 3.5 years for the permitting process, with an indicative period of 2 years for "pre-application procedures" – e.g. preparation of the necessary schedules, concept for public participation and public consultation on PCI proposals – and 1.5 years for determination of applications for "permits". In the UK this may include planning permissions, development consent orders, marine licences and works authorisations as appropriate, depending on the type of PCI infrastructure and consenting regimes.

3.5 For the PCIs listed in Wales (see above), the relevant consenting authorities in Wales will include the Welsh Ministers, Natural Resources Wales, the Planning Inspectorate, the Marine Management Organisation and relevant local planning authorities ("LPAs").

3.6 This guidance provides information on the roles of the Welsh Government, permitting authorities and project promoters in the decision making process applicable to PCIs. It also gives references to the relevant articles in the TEN-E Regulation for ease of reference.

Welsh Ministers as Competent Authority

- Acknowledge or reject the notification of the PCI project [Article 10(1)(a)].
- Establish on a case-by-case basis, a detailed scheme for the permit granting process. This is to be done in consultation with the project promoter and with the other authorities [Article 10(4)(b)].
- Monitor compliance with time limits. [Article 8(3)(c)].
- Reset individual time limits, where the original time limits are not met. [Article 8(3)].

- Modify or approve the public participation concept submitted by the project promoter. [Article 9(3)].
- Submit an annual report to the respective Group on progress or delays in the implementation of PCI with regard to the permit granting processes. [Article 5(6)].
- Liaise closely with Competent Authorities in other Member States, and prepare joint schedules endeavouring to align timetables [Article 10(4)(b)].
- If a permitting authority has informed and provided justification to the Welsh Government of a delay the Welsh Ministers shall reset the time limit within which that individual decision shall be issued, whilst still complying with the overall time limits set in accordance with Article 10.

Permitting Authorities

- Collaborate with Welsh Government (Competent Authority) in coming to an assessment of the reasonably detailed outline of the project submitted by the project promoter for the purpose of acknowledging the notification and establishing the start of the permit granting process [to be in line with Article 10.1(a)].
- Collaborate with Welsh Government (Competent Authority) in the setting of time limits for their decisions. [Article 10.4(b)].
- Inform Welsh Government where a decision is not expected to be met and provide a justification for the delay. [Article 8.3(c)].
- Inform and copy its decision to Welsh Government at the same time as notifying the project promoter of the decision. [Article 8.3(c)].
- If an individual decision by an authority concerned is not expected to be delivered within the time limit, that authority shall inform the Welsh Government without delay and include a justification for the delay.

Project Promoters

- Draw up an implementation plan (further detail below) for the Project [Article 5(1)].
- Provide a reasonably detailed outline of the project when the PCI process is being initiated as part of the notification process [Article 10(1)(a)].
- Have regard to the principles underlying public participation in the process and provide the relevant information [Annex VI(3) and (4)].
- Draw up and submit a concept for public participation to the Welsh Government [Article 9(3)]and prepare a report summarising the results of the activities related to the public participation prior to the submission of the application file [Article 9(4)].

- Ensure the completeness and adequate quality of the application file. [Article 10(5)].
- Establish, maintain and update a project website (further information below) with relevant information about the project of common interest, which shall be linked to the Commission website and which shall meet the requirements specified in Annex VI.6. Commercially sensitive information shall be kept confidential [Article 9 (7)].
- Co-operate with Welsh Government and permitting authorities to meet deadlines and comply with the detailed schedule for the permit granting process by ensuring all required information is made available promptly to the relevant authorities to ensure that the time limits set can be met. [Article 10(5)].
- Submit an annual report for the projects set out in Annex II.1 and 2, to Welsh Government. [Article 5(4)] – (further information below).

4 Engagement with Welsh Government

4.1 For all projects defined as falling under the TEN-E Regulation the project promoter should engage with Welsh Government officials prior to forming its implementation plan (UK Manual para 4.2) which should happen prior to any formal written notification application. This early engagement will enable officials to provide advice to the project developer on requirements and level of information which will be required at each stage including the concept of public participation.

Implementation Plan

Under Article 5(1), project promoters must draw up an Implementation Plan for the PCI, that includes timetables for:

(a) feasibility and design studies;

(b) approval by the national regulatory authority or by any other authority concerned;

(c) construction and commissioning;

(d) the permit granting schedule referred to in Article 10(4)(b).

As the permit granting schedule will not be prepared until after written notification to the NCA has been accepted, the timetable required at point d. is understood to mean the timetable for drawing up the schedule, not the schedule itself.

4.2 Following discussions with Welsh Government and the local planning authority the project promoter will be clear which route the development will need to follow. What form of planning application will be required i.e. planning application to the local planning authority or an application for a development of national significance and whether an EIA is required for the project as well, or whether the project is considered to be permitted development. The project promoter will also be clear as what information is required for which stages of the process.

4.3 The project promoter should be in contact with the local planning authority from the outset whether a planning application is required or not. Where a planning application is required these discussions could cover issues such as design of structures and to receive locally specific knowledge and information.

4.4 As well as the planning authority it is recommended that the project promoter also contacts other consenting bodies such as Natural Resources Wales. Welsh Government officials can help with contact details as required.

4.5 Depending on whether a planning application is required there are two processes to follow which are detailed below.

4.6 Further information is available on the development management process in Wales in the Development Management Manual[4]. This manual also provides information on the planning application process and on requirements in relation to public engagements.

Project Promoter's website

Project Promoters are also required to set up and regularly update a webpage for each PCI that includes information set out in Annex VI.6 .

The website must make available, as a minimum:

(a) the information leaflet referred to in Annex VI(5) of the TEN-E Regulation;

(b) a non-technical and regularly updated summary of no more than 50 pages reflecting the current status of the project and clearly indicating, in case of updates, changes to previous versions;

(c) the project and public consultation planning, clearly indicating dates and locations for public consultations and hearings and the envisaged subject matters relevant for those hearings;

(d) contact details in view of obtaining the full set of application documents;

(e) contact details in view of conveying comments and objections during public consultations.

(f) a link to the Commission's website.

It would also be useful to include a link to the Welsh Government's website (to this guidance) and the relevant permitting authority (where relevant) and a link to the "Manual of Procedures".

Project Promoter's annual report

In accordance with Article 5(4), project promoter will need to provide an annual update to the Welsh Ministers on 31 March. The report should include:

- Details of the progress achieved in the development, construction and commissioning of the project, in particular with regard to permit and consultation procedures.
- Where relevant, delays compared to the implementation plan, the reasons for such delays and other difficulties encountered.
- Where relevant a revised plan aiming at overcoming the delays.

5 The Permit Granting Process: Article 10

5.1 The permit granting process consists of two procedures: (a) the pre-application procedure and (b) the statutory permit granting procedure.

(a) Pre-application procedure – Notification Stage

5.2 The pre-application procedure covers the period between the start of the permit granting process and the acceptance of the submitted application file by the Welsh Ministers. This period is to take place within an indicative period of 2 years. Article 10(2) of the Regulation does provide for an extension of the time period by a maximum of 9 months (for both the pre-application procedure and the permit-granting procedure combined).

5.3 For the purpose of establishing the start of the permit granting process, the project promoter must notify the project to the Welsh Ministers. The Welsh Ministers, within 3 months, must acknowledge or reject the notification, and if rejecting must provide a reason for this. This will be done in letter form and can be sent to Welsh Government officials via e-mail, the contact details will be provided on the Welsh Government website as well as this guidance.

5.4 The Welsh Ministers will contact all the relevant authorities for their assessment on whether or not the project is sufficiently mature to enter the permit granting process. It is, therefore, essential that the project promoter gives details of the consents that will be required at this stage. In the event that any required consent is not identified, this may lead to delays in the project.

5.5 Following acknowledgement by the Welsh Ministers of the notification of the start of the permit granting process (Article 10(1)(a)), the Welsh Ministers will identify the scope of material and level of detail of information to be submitted. This will be done in close co-operation with the other authorities concerned and, where appropriate, on the basis of a proposal of the project promoter.

5.6 As part of the notification of the commencement of the permit granting process, the project promoter is required to submit a reasonably detailed outline of the project to the Welsh Ministers. As part of the reasonably detailed outline of the project, the Welsh Government will expect that the project promoter details the extent of the project and lists all the consents that, in the opinion of the project promoter, are required. Any necessary environmental assessments should be included.

5.7 Welsh Ministers, will draw up a detailed schedule for the permit granting process. The schedule will be drawn up in close co-operation with the project promoter and other authorities concerned. This will be finalised once the concept of public participation is drafted and agreed.

5.8 It should be noted that this schedule will need to include any appeal processes contained within the various consenting regimes which may be applicable to the project but it would not include timescales for include Court challenges. Annex VI.2 to the TEN-E Regulation sets out the guidelines for the schedule. These guidelines which are the minimum required are:

Welsh Ministers – Detailed Schedule

(a) the decisions and opinions to be obtained;

(b) the authorities, stakeholders, and the public likely to be concerned;

(c) the individual stages of the procedure and their duration;

(d) major milestones to be accomplished and their deadlines in view of the comprehensive decision to be taken;

(e) the resources planned by the authorities and possible additional resource needs.

5.9 Public consultation and participation are to be carried out during this stage by the project promoter (and relevant parties, if appropriate).

Concept of Public Participation

5.10 Within 3 months of the written notification from Welsh Ministers acknowledging the project, the developer is required to submit a "concept for public participation" (Article 9(3)) according to the principles in Annex VI.4 of the TEN-E Regulation to the Welsh Ministers.

5.11 The Welsh Ministers have to approve the concept for public participation within 3 months (Article 9(3)), and may take into consideration any form of public participation and consultation that took place before the start of the consenting process.

Concept for public consultation

This must include, as a minimum, the following information:

(a) the stakeholders concerned and addressed;

(b) the measures envisaged, including proposed general locations and dates of dedicated meetings;

(c) the timeline;

(d) the human resources allocated to the respective tasks.

5.12 In certain circumstances it may not be possible to include specific dates and it may be acceptable for the concept to set out in general terms what is proposed and use an indicative timescale in which consultations would be undertaken. It should be noted however, that for PCIs that are in more than one MS, consultations on the PCI in each MS must be held within two months of the first consultation.

5.13 The TEN-E Regulation sets out the minimum requirements for "public participation" which would meet the consultation requirements in Article 9(3) and Annex VI.3. Annex VI.5 also specifies that for the required public consultation, the relevant parties shall at least:

(a) publish an information leaflet of no more than 15 pages, giving, in a clear and concise manner:
- an overview of the purpose and preliminary timetable of the project
- the national grid development plan
- alternative routes considered
- expected impacts, including of cross-border nature, and
- possible mitigation measures, which shall be published prior to the start of the consultation.
- The information leaflet shall furthermore list the web addresses of the transparency platform referred to in Article 18 and of the manual of procedures referred to in point (1);

(b) inform all stakeholders affected about the project through the website referred to in Article 9(7) and other appropriate information means;

(c) invite in written form relevant affected stakeholders to dedicated meetings during which concerns shall be discussed.

5.14 The concept for public participation should be proportionate to the nature of the infrastructure proposed, but must include at least one public consultation.

5.15 Developers should consider how best to engage with the public, considering the likely stakeholders and issues that might be of concern and how these relate to existing regimes. It should include some indication of where in the project timetable any proposed information events might occur. It is not expected, however, that all concepts for public participation would be able to state the precise day, hour or location of any prospective information event.

5.16 In indicating the "human resources" to be allocated to specific consultation tasks, it may not be possible to state explicitly the number of persons allocated to each part of a consultation process, nor the precise timing of potential consultation events. However developers will be expected to indicate the type of resources expected to be committed to consultation tasks (for example a

project engineer and environmental specialist to explain the project and any potential significant effects) and an indication of the timing of consultations to demonstrate that the TEN-E obligations and any UK obligations will have been met before an application is submitted.

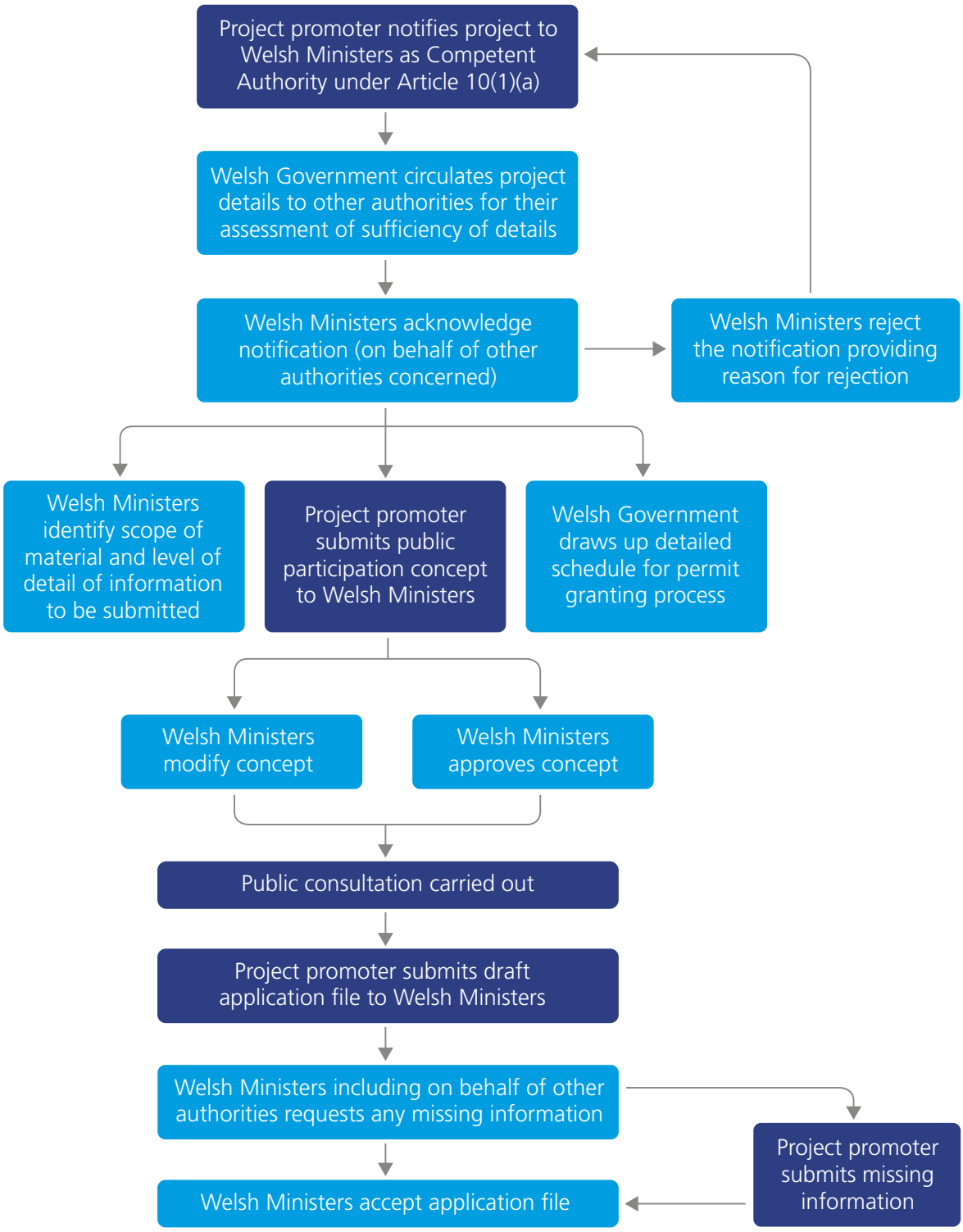
5.17 Some UK consenting regimes also set out specific requirements for consultation and these should be included. For example, statutory requirements are in place for planning applications, marine licence applications and the Environmental Impact Assessment ("EIA") regime in the UK. The concept for public participation would need to take other requirements for consultation into account and it is recommended that these be aligned and streamlined where possible.

5.18 Note, however, that any statutory consultations required by UK consenting regimes during the examination of an application do not override the requirement in the TEN-E Regulation to hold at least one public consultation before submission of the "draft application file" – which should be accompanied by a report on the consultation.

5.19 Project promoters also need to take into consideration that some consultations in relation to statutory regimes in Wales take place after the formal application file has been accepted and therefore further arrangements beyond statutory consultations need to be included. It is recommended that developers discuss any proposed "concept for public participation" with the Welsh Government at the very early stages.

Projects of Common Interest Permit Granting Process

Figure 1: The Pre-Application Procedure Overview



(b) The Statutory Permit Granting Procedure

5.20 The statutory permit granting procedure covers the period from the date of acceptance of the submitted application file until the comprehensive decision is taken.

5.21 Article 10(1)(b) of the TEN-E Regulation provides that the period shall not exceed one year and six months. While the combined duration of the pre-application and permit-granting procedures should not exceed a period of 3 years and 6 months, the TEN-E Regulation provides that where the Welsh Ministers consider one or both of the two procedures will not be completed before the set time limits, it may decide before their expiry and on a case by case basis, to extend one or both of these time limits by a maximum of 9 months for both procedures combined.

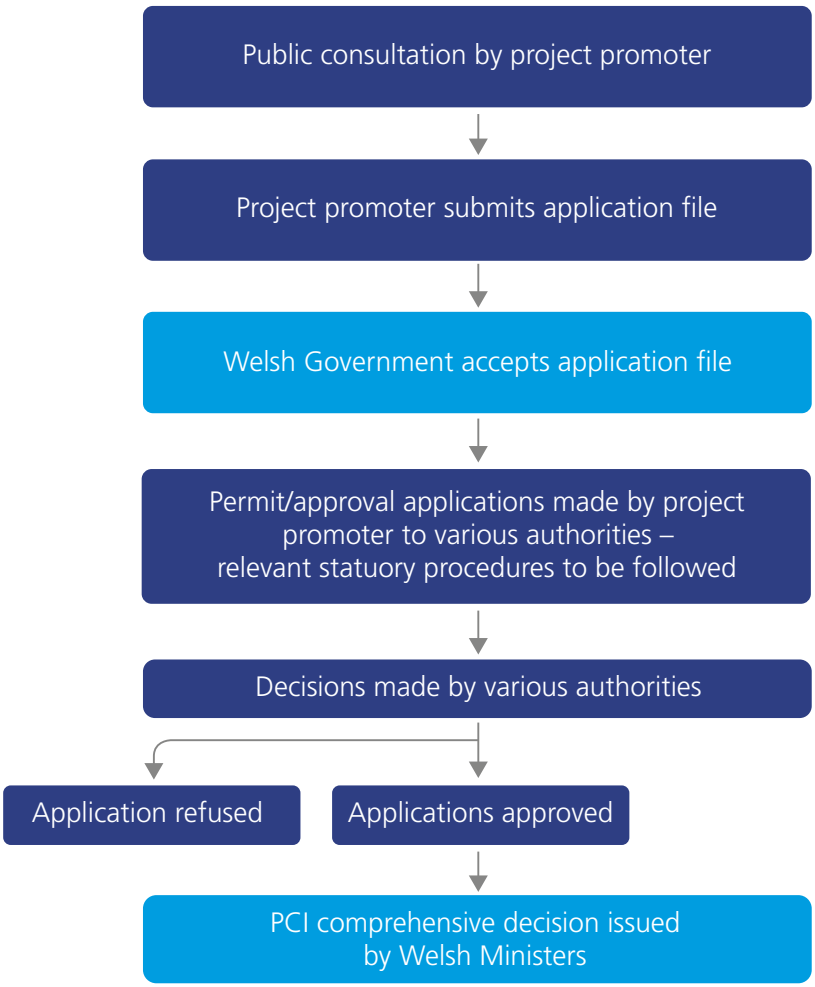
5.22 The TEN-E Regulation does not replace any consents for infrastructure required in the UK. Although the NCA will facilitate and co-ordinate the permit granting process it does not determine consents (although the authority may also be a consenting authority that will ordinarily determine consent applications).

5.23 In Wales the processes for applying for consents are set out in guidance issued by the relevant consenting authorities. These will continue to apply in respect of PCIs and developers must ensure that they meet all the statutory requirements for relevant consents.

5.24 The NCA will monitor compliance by consenting authorities with the detailed schedule for permits and should ensure that a comprehensive decision is delivered within 18 months following acceptance of the application.

Projects of Common Interest Permit Granting Process

Figure 2: The Statutory Permit Granting Procedure Overview



6 Application Process under TEN-E in Wales

Consenting Regimes in Wales

The following list is not exhaustive and developers should take particular note of DBEIS' Manual of Procedures, the TEN-E Regulation and any subsequent revisions to it and any other relevant legislation.

Developers should note that this guidance document is neither legally binding nor a substitute for relevant legislation or for independent advice given by suitably qualified professionals as appropriate.

Marine Licensing

Natural Resources Wales administer the marine licensing system in the Welsh inshore region (0 – 12 nautical miles), on behalf of the Welsh Ministers and since 1st April 2018 for the offshore region as well (12 – 200 nautical miles). Early engagement with NRW is advised as proposals are developing and a pre-application service is available to support developers[5].

Detailed information on the marine licensing requirements is available from NRW website and the Marine Licensing Team:

www.naturalresources.wales/permits-and-permissions/marine-licensing/?lang=en

marinelicensing@naturalresourceswales.gov.uk

NRW general enquiries line: 0300 065 3000.

The Town and Country Planning Act 1990 (1990 Act)

The Welsh Ministers have devolved responsibility for Town and Country planning (with certain exceptions). Planning consent is usually granted by the local planning authority, although certain major developments are granted by the Welsh Ministers (see DNS below for example).

The processes are set out in secondary legislation, such as the Town and Country Planning (Development Management Procedure) (Wales) Order 2012.

Some PCI development may benefit from permitted development rights (under the Town and Country Planning (General Permitted Development) Order 1995 (as amended in relation to Wales by the series of Town and Country Planning (General Permitted Development) (Amendment) (Wales) Orders, made between 2002 and 2016), where the works do not require express consent from the local planning authority. However local planning authorities can remove these rights through an Article 4 direction and therefore it is essential to check with the local planning authority as part of your early discussions. As mentioned earlier if a proposed development requires an EIA, you will need to apply for planning permission.

The Planning Act 2008

The Planning Act 2008 as amended (PA 2008) established that nationally significant infrastructure projects (NSIPs) require development consent in the form of an Order, referred to as a Development Consent Order (DC)) granted by the Secretary of State. The PA 2008 applies in England and Wales and where a project meets the criteria for a NSIP set out in the PA 2008 it will require a DCO from the Secretary of States and not planning permission under the 1990 Act. PA 2008 as amended establishes a new procedure in relation to associated development in Wales in relation to a DCO, where associated development can now be considered as part of the DCO.

The Wales Act 2017made a number of amendments to the PA 2008 including removing from the DCO regime the construction and extension of generating station in Wales and Welsh territorial waters of a capacity not exceeding 350 MW.

Planning Wales Act 2015

Applications for Developments of National Significance (DNS) projects are dealt with by the Planning Inspectorate on behalf of Welsh Ministers. A DNS is a type of planning application for a large infrastructure project of national importance – for example, a wind farm, power station or reservoir. A full list of the types of DNS developments is defined in the Developments of National Significance (Specified Criteria and Prescribed Secondary Consents) (Wales) Regulations[6]. The Developments of National Significance (Procedure) (Wales) Order 2016 sets out procedural detail.

A DNS differs from a normal planning application in the way that it is decided. Instead of the LPA making the decision, an Inspector examines the application and makes a recommendation to the Welsh Ministers based on planning merits and national priorities. The Minister then decides whether or not to grant permission.

The DNS process is designed to encourage the applicants on such a scheme to undertake early engagement with:

- the relevant LPA
- local communities
- statutory consultees and
- other stakeholders.

Anyone considering a DNS project should contact the Planning Inspectorate as soon as possible after a site has been chosen. This will ensure that as much work can be done to reduce objections to a scheme as possible before submission. This in turn allows the formal application process to be streamlined.

Further information:
www.gov.wales/topics/planning/developcontrol/developments-of-national-significance/?lang=en

Environmental Impact Assessments ("EIAs")

The legal requirement for an EIA comes from Directive 85/337/EEC. This Directive was amended and is now codified in Directive 2011/92/EU of 13 December 2011 ("the EIA Directive"), as amended by Directive 2014/52/EU. In Wales, for town and country planning, this was transposed by the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 [external link].

These Regulations apply to all projects which fall under the town and country planning system. Other Regulations apply to those projects subject to development consent outside this system (such as marine consents).

The EIA Directive may apply to energy infrastructure which has been given PCI status under the TEN-E Regulation. Infrastructure listed in Annex I of the EIA Directive will require an EIA (Article 4(1) of the EIA Directive) and those listed in Annex II may require an EIA (Article 4(2) of the EIA Directive).

Also of relevance is the Marine Works (Environmental Impact Assessment) regulations 2007 (as amended). The Marine Works have been amended multiple times, most recently in 2017.

2007 regulations: www.legislation.gov.uk/uksi/2007/1518/contents/made

latest amendment in 2017:
www.legislation.gov.uk/uksi/2017/588/contents/made.

European Protected Species ("EPS")

EPS are animals and plants that receive protection under the applicable domestic habitats legislation (e.g. Conservation of Habitats and Species Regulations 2017, the Offshore Marine Conservation (Natural Habitats &c) Regulations 2007 and the Wildlife and Countryside Act 1981). These species are listed at Annex IV of Directive 92/43/EEC ("the Habitats Directive") as species of European Community interest and in need of strict protection.

Overhead lines

Overhead lines of up to 132kV, or which are less than 2km in length require development consent from the Secretary of State for Business, Energy and Industrial Strategy under section 37 of the Electricity Act 1989. Overhead lines which fall outside of these criteria are likely to be Nationally Significant Infrastructure Projects ("NSIPs") and require development consent from the Secretary of State under the Planning Act 2008 or be exempt from consenting requirements under the Overhead Lines (Exemption) (England and Wales) Regulations 2009.

www.gov.uk/government/uploads/system/uploads/attachment_data/file/336136/section_37_revised_guidance.pdf

The Wales Act will amend section 37 of the Electricity Act 1989 and section 16 of the PA 2008 to allow the Welsh Ministers or LPAs, to authorities under the 1990 Act overhead electricity lines (subject to a limit of 132 Kv nominal voltage), the purpose of which is to facilitate the connection to the electricity national grid of generating stations consented by Welsh Ministers.

Other Acts

Developers should also be aware of the Well-being of Future Generations (Wales) Act 2015, the Environment (Wales) Act 2016 and relevant Health & Safety legislation.

When a planning application is required:

The Development Management Manual will be of assistance for those requiring a planning application:

www.gov.wales/topics/planning/policy/development-management-manual/?lang=en

The **Planning (Wales) Act 2015** introduced section 61Z1 of the 1990 Act, allowing the Welsh Ministers to make regulations requiring LPAs to provide pre-application services. Those regulations are the Developments of National Significance (Wales) Regulations 2016[7] and the Town and Country Planning (Pre-Application Services) (Wales) Regulations 2016[8]. The Act also places a duty on applicants to carry out pre-application consultation with the community and specified consultees for certain types of development.

LPAs are required to provide a statutory pre-application service for those who request it. LPAs will provide a written response to an applicant, containing certain information as a minimum. A fee is payable to the LPA for this service according to a national fee schedule based on the size and scale of the proposed development.

LPAs can offer additional written responses, meetings etc. should an applicant request further pre-application advice beyond the statutory minimum requirements. Discretionary fees can be charged for these services. Information can be found in Section 6 of the Development Management Manual.

Practice Guide: Realising the potential of pre-application discussions (Welsh Government, 2012) provides information on:

- The benefits of a pre-application service
- Providing a pre-application service
- Processes and tools for pre-application discussions
- Checklists for planning authorities and applicants

www.gov.wales/topics/planning/policy/guidanceandleaflets/preappguide/?lang=en

It is possible for developers to apply for outline planning permission that gives consent to proposed developments in principle, but requires a further application for permission in respect of "reserved matters" before construction can commence. However, because the comprehensive decision comprises all the consents and permits necessary for a developer to be granted authorisation for construction of a PCI and outline planning permission is not sufficient to grant an authorisation, it will not be part of the comprehensive decision, which will need to include the permission for the reserved matters. This might give rise to timetabling conflicts for developers who might wish to obtain outline planning permission for e.g. some parts of the development whilst applying for consent for another part, e.g. outline permission for a sub-station before or at the same time as consent for an OHL, but not apply for reserved matters permission until construction of the OHL was about to commence, which could be after the 18 month timescale for a comprehensive decision.

When developments do not require a planning application:

Some TEN-E projects may not require planning permission as they are considered permitted development and therefore under these circumstances further consideration needs to be given to public participation to ensure the PCI is in line with the requirements included in the TEN-E Regulations.

Other Information for Applicants

Project promoters should be aware of and take into account both the Environment (Wales) Act 2016 & the Well-being of Future Generations (Wales) Act 2015.

Contact details

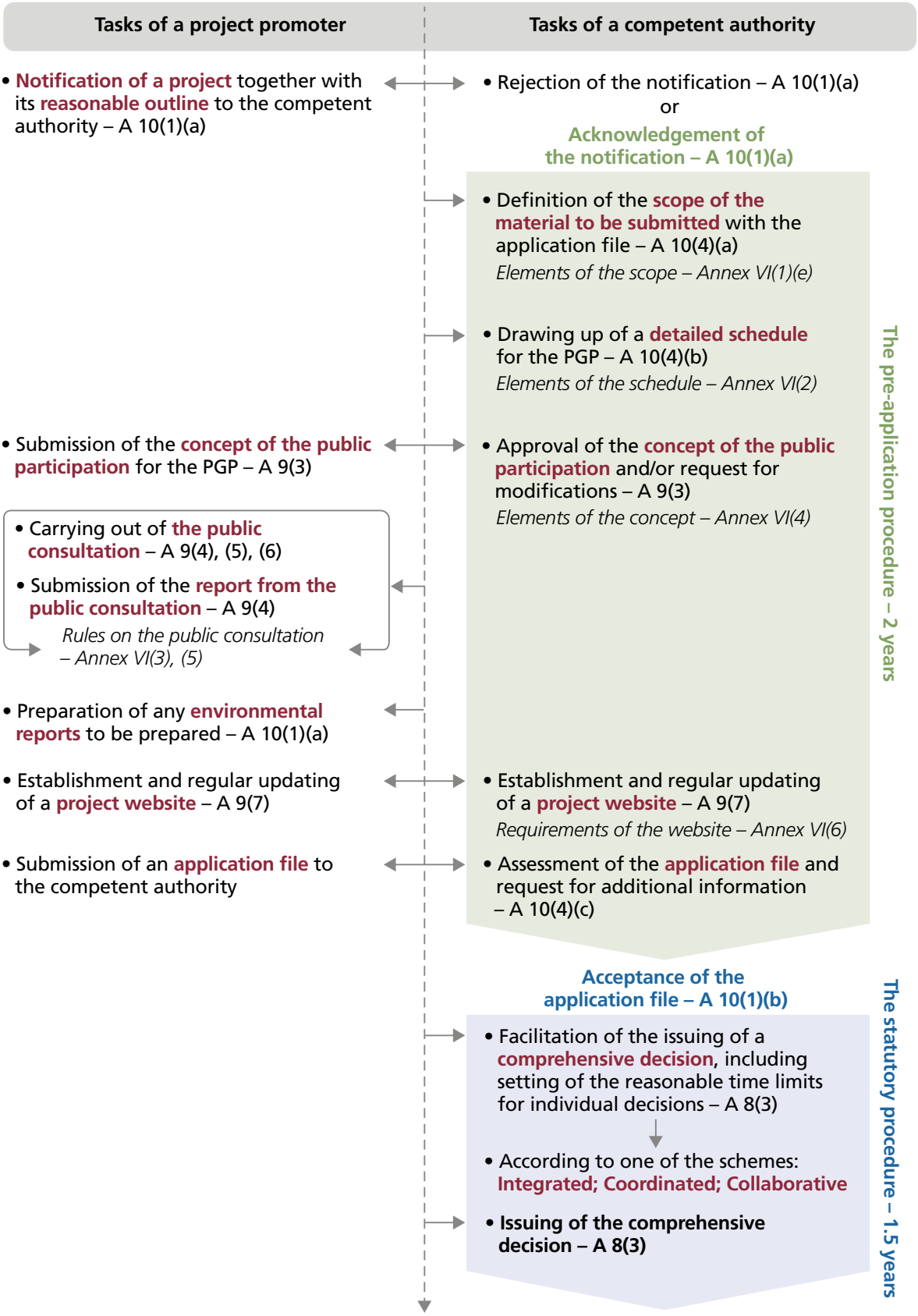
For PCIs wholly or partly in Wales for which Welsh Ministers have devolved consenting powers, the primary contact will be:

Decarbonisation and Energy Division
Llywodraeth Cymru / Welsh Government
Sarn Mynach,
Llandudno Junction,
LL31 9RZ

Ffôn / Telephone
E-bost / E-mail

PCI Process

Figure 3: Timeline



Checklist for submitting notification to Welsh Ministers

The notification must include a reasonably detailed outline of the project to enable Welsh Government officials to decide on the maturity of the project and its suitability to enter the permitting process. It is advisable however, that during prior engagement, this information is shared with the decision makers as well as Welsh Government.

Each consenting regime will require specific information to be submitted with an application for consent of a project and this information is available under the relevant procedure and the promoter will need to be familiar with these requirements.

The reasonable detailed outline will include at least the following basic information:

- A description of the main elements of the project in the UK and specifying the Welsh element of the project (e.g. a submarine cable for an electricity interconnector, with any electricity-substations or similar associated infrastructure that would be required to construct and operate the proposed PCI).
- A description of the main elements that are in other Member States.
- The location of the project. (Where the project is linear and alternative corridors are being considered, this should include the details of the alternatives.) The information on location should state clearly whether it is within or partly within a designated area (e.g. Special Protection Area (SPA), Area of Outstanding Natural Beauty (AONB), Site of Special Scientific Interest (SSSI) or other designated area). This information should be presented on an OS based map.
- If the PCI is likely to have any significant environmental effects, any Environmental Impact Assessment (EIA) screening or scoping opinion given by relevant authorities or credible plans to request an appropriate screening or scoping opinion.
- The principal Promoter(s) for the Project in all relevant Member States.
- Any consultations or public information already available for the project.
- Information on the engagement with the consenting authorities to date and an understanding of what consenting regimes are required for the project.
- Contact details for the NCA (s) in other Member States.
- A provisional project timetable indicating the target date for the project to start operation. (This could be the "Implementation Plan" required under Article 5(1) of the TEN-E Regulation.)
- The primary contact point for the Promoter.
- A brief description of the expected benefits of the PCI.

References

1 Paragraph 2.3 of UK Manual www.gov.uk/government/uploads/system/uploads/attachment_data/file/311184/uk_manual_procedures_ten_e_regulation.pdf

2 www.gov.uk/government/uploads/system/uploads/attachment_data/file/311184/uk_manual_procedures_ten_e_regulation.pdf

3 TEN-E Regulations – Annex II – Energy Infrastructure Categories www.eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R0347&from=EN

4 www.gov.wales/docs/desh/publications/161118development-management-manual-en.pdf

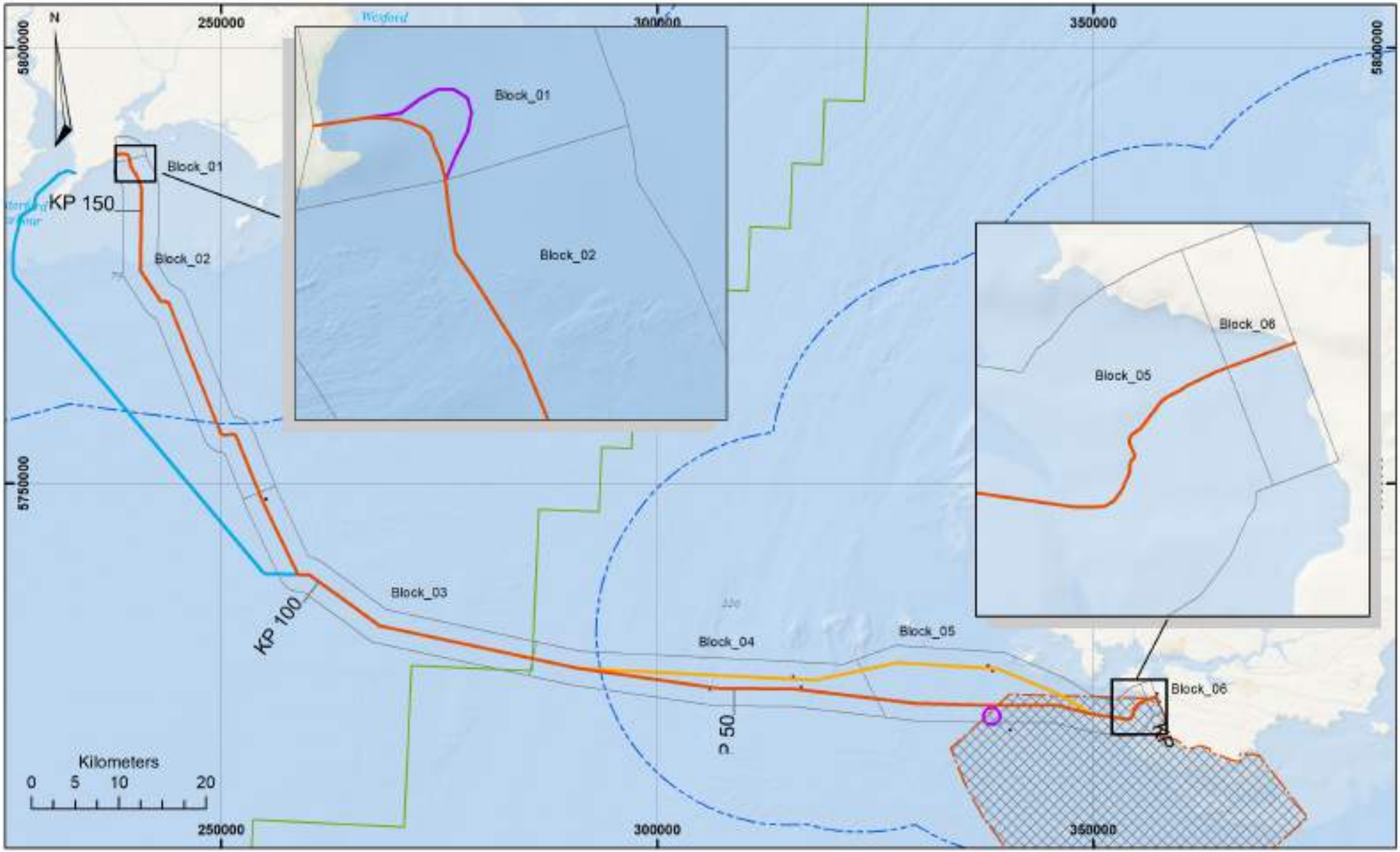
5 The Wales Act 2017 transfers marine licensing functions to Welsh Ministers for the Welsh offshore region www.legislation.gov.uk/ukpga/2017/4/contents/enacted/data.htm

6 S.I. 2016/358 www.legislation.gov.uk/wsi/2016/358/contents/made

7 S.I. 2016/56 www.legislation.gov.uk/wsi/2016/56/contents/made

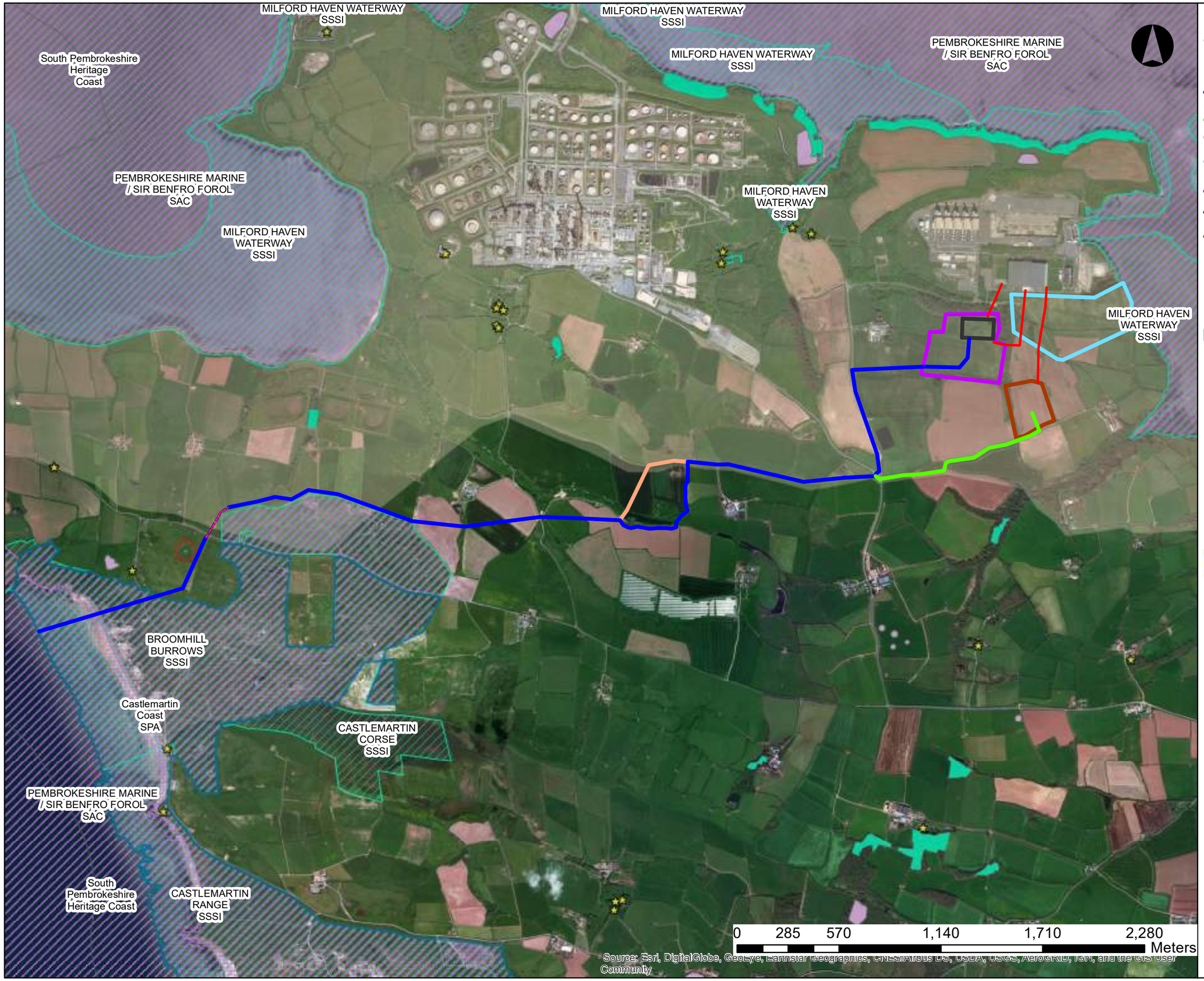
8 S.I. 2016/61 www.legislation.gov.uk/wsi/2016/61/contents/made

4.3 APPENDIX 3 – MARINE CABLE ROUTES


N
250000
300000
350000
5800000
5750000
Block_01
Block_02
KP 150
KP 100
Block_03
Block_04
Block_05
Block_06
Kilometers
0 5 10 20
Route A
Route E
Option C
Option D
BLOCKS
Archeological Exclusion Zones
Explosive Dumping Ground
Firing Range
MARINE LIMIT 12NM
EEZ
MMT

4.4 APPENDIX 4 – ONSHORE INFRASTRUCTURE PLAN

A3



Greenlink - Cable + Route Converter Station

- AC Cable Routes

Indicative Preferred Cable Route

- Cut and Fill
- Directional Drill
- Alternative Sub Option
- Alternative Reservoir Route
- Converter Station Site Boundary Option 1
- Converter Station Site Boundary Option 2
- Proposed Station Perimeter
- Converter Station Site Boundary Option 3
- Ancient Woodland
- Scheduled Monument
- Heritage Coasts
- Listed Buildings
- Special Protection Areas (SPA)
- Sites of Special Scientific Interest (SSSI)
- Special Area of Conservation (SAC)
- Historic Landscape
- Devil's Quoit 50m Buffer

Greenlink

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Connecting Europe Facility

Issue	Date	By	Chkd	Appd
P0	2018-10-04	MJ	GM	GM

ARUP

Client: elementpower

Job Title: **Greenlink**

Aerial Updated Route Environmental Constraints

Scale at A3

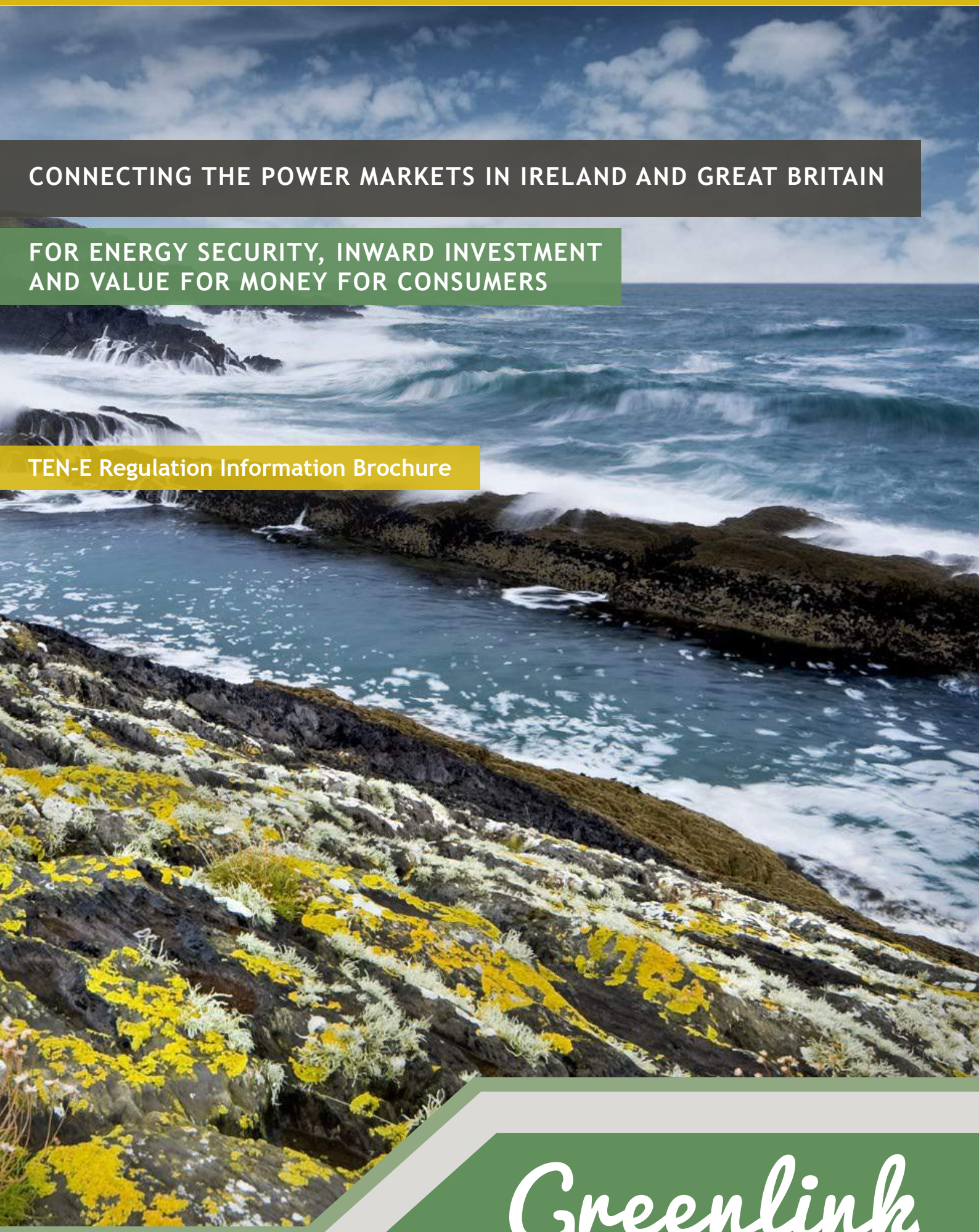
Job No	Drawing Status	Issue
246369-00	**Preliminary**	**P1**

Drawing No: **SK005**

04/10/2018 12:57:35

MXD Location: \\global\Europe\Cork\Jobs\246000\246369-00\4. Internal\4-03 Design\4-03-03 Infrastructure\01 GIS\04_Map Documents\ENV_Environment\UK\MXDs\Pembrokeshire_env_constraints_Landowners_13.08.18.mxd

4.5 APPENDIX 5 – PROJECT BROCHURE INFORMATION LEAFLET



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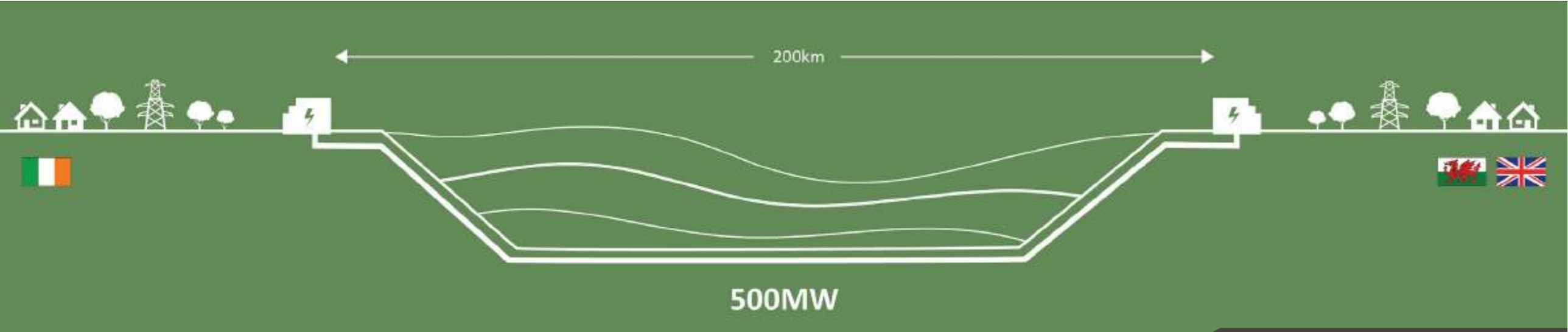
TEN-E Regulation Information Brochure

Greenlink

INTERCONNECTOR



GREENLINK INTERCONNECTOR

Consents required to construct the projects are expected to include:

	Wales	Ireland
Converter station	Planning permission - major development - Pembrokeshire County Council	Planning permission - Strategic Infrastructure Development - An Bord Pleanála Authorisation to construct - Commission for the Regulation of Utilities
Onshore cable route	Lawful Development Certificate	Planning permission - Strategic Infrastructure Development - An Bord Pleanála Consent to lay electricity lines across lands - Commission for the Regulation of Utilities Consent to lay electricity lines under the public road - Commission for the Regulation of Utilities
Marine cable	Marine Licence - Natural Resources Wales Marine Works Licence - Milford Haven Port Authority	Foreshore Licence - Department of Housing, Planning and Local Government (Foreshore Unit)

STATUS OF THE PROJECT: The project is in the pre-planning phase. Throughout this phase of the project we will be consulting all key stakeholders, including the public, to ensure that they can input into the development process.

Co-financed by the Connecting Europe Facility of the European Union

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Greenlink is a proposed 500 megawatt (MW) subsea and underground cable electricity interconnector (with associated converter stations) between the existing electricity grids in Ireland and Great Britain (GB), allowing for electricity to flow both ways between the two countries. The project will provide a new grid connection between EirGrid's Great Island substation in County Wexford (Ireland) and the National Grid's Pembroke substation in Pembrokeshire (Wales).

Greenlink will have key strategic importance, as it will provide significant additional interconnection capacity between Ireland, GB and continental Europe. The construction and development of Greenlink will deliver: increased energy security; inward investment and value for money to consumers; and enable the further integration of low carbon renewable energy sources.

Greenlink has been awarded Project of Common Interest (PCI) status, making it one of Europe's most important energy infrastructure projects and granting it the "highest national significance" possible.

Greenlink will consist of two converter stations, each located close to the Great Island substation in County Wexford and Pembroke substation in Pembrokeshire. The converter stations will be connected by two high voltage direct current (HVDC) cables under the Irish Sea. A converter station converts electricity from Alternating Current (AC) to Direct Current (DC) and vice versa.

DC electricity is typically used for the transmission of electricity over long distances because it has lower losses, negligible heating effects and is therefore suitable to be buried underground. Accordingly, there will be no overhead lines between the two converter stations. Onshore the cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

Constructing and commissioning an interconnector requires the completion of a thorough programme of environmental and technical assessment to ensure that the final interconnector design fully considers the environment in which it is built. The Greenlink interconnector is planned for commissioning in 2023.

The project will require planning permission in Ireland and in Wales.

380,000

Potential to power 380,000 homes*

€400m

of private capital investment for Ireland and Wales

Energy

Supports the growth and integration of low carbon energy

Security

Enhances the security of supply for electricity consumers

Value FOR Money

Downward pressure on electricity bills

Jobs

Jobs and knock-on economic benefits during construction

Inward investment and jobs

Greenlink represents €400m (£350m) of private capital investment in Ireland and Wales and will create jobs during construction and operation as well as knock-on economic benefits.

An integrated European grid

Interconnection has a vital role to play in connecting energy generation between countries to provide reliable and affordable power for all. Greenlink will have strategic importance, by doubling the interconnection capacity between Ireland and GB and contribute to each country's interconnection targets.

Security of supply

The construction of Greenlink will deliver increased security of supply for electricity consumers, by diversifying energy sources and providing additional import and export capacity in both countries.

Integration of renewable energy

Greenlink improves the integration of renewable technologies in Ireland and GB supporting the growth of the green energy sector, which offers significant economic and environmental benefits to both countries.

Better energy price competition

Greenlink will deliver greater market integration and competition in the provision of electricity, ultimately providing significant benefits to consumers in Ireland, GB and continental Europe.

*Figure for number of homes is based on typical annual household use of 4,200 kWh (CER, Review of Typical Consumption Figures – Decision Paper 12 March 2017 (CER17042) and estimated total flows from UK to SEM of 1,600,000 MWh/yr.

Great Britain

National Grid is the Electricity System Operator for the whole of GB and operates the electricity transmission network in Wales and England including the 400kV network and substation at Pembroke. In its role as System Operator for GB, National Grid publishes plans and assessments for the economic and efficient development of the GB electricity transmission networks:

- In Future Energy Scenarios (FES), National Grid considers different potential future impacts on the electricity system. In the 2017 FES the amount of interconnection capacity could reach 19GW by 2030 compared to 4GW today.
- In the Network Options Assessment (NOA), National Grid carries out economic analyses to determine which transmission investments are efficient. The 2017/18 NOA recommends additional interconnection from GB to Ireland, beyond the 1.5GW capacity provided by Greenlink and the existing interconnectors (East West Interconnector (EWIC) and Moyle).
- The Electricity Ten Year Statement (ETYS) includes data on the existing and planned transmission networks in GB and the ETYS 2017 references Greenlink as one of the planned interconnectors that has a connection agreement with National Grid.

Ireland

EirGrid is the Electricity System Operator for Ireland and with its subsidiary, SONI, operates the island of Ireland's electricity system. In its role as System Operator for Ireland, EirGrid publishes a ten year transmission development plan.

- Greenlink is part of Transmission Development Plan 2016-2026, is referenced as part of the European Ten Year Network Plan 2016 (ENTSO-E TYNDP 2016) and as a PCI. The document notes that interconnection assists in increasing Security of Supply and Competition and has been addressed in the plan.

Offshore studies and assessments

The subsea cable route is expected to be up to 170km long. The final length of the cable will depend on the findings of subsea surveys as well as ongoing consultation with key stakeholders. Initial cable route selection has centred on desk-based work and the assessment of known data and constraints. Environmental and technical constraints will be assessed and the route that offers the best solution to challenges identified while maintaining the shortest route solution will be chosen as the preferred route.

Subsea surveys are intended to take place in 2018 in order to identify constraints facing the subsea cable routes and enable a preferred option to be selected.

The results of the subsea surveys will not only aid the selection of the preferred cable route but also the appropriate installation and protection methods to be adopted.

Technical and environmental assessment

As part of the project development, a series of technical and environmental assessment studies are being carried out to establish the viability of all the proposed converter sites and cable routes and to consider any potential impacts and opportunities arising from the project development. Greenlink is a cross-border project and no adverse cross-border impacts are expected.

Onshore studies and assessments

Biodiversity

Surveys will be carried out and the data assessed to ensure that the final onshore elements of Greenlink are designed sympathetically to the local environment and wildlife and where possible enhancement measures will be employed.

Surveys will cover the landfall sites, the various cable routes under consideration and the possible converter station locations.

As well as birds, wildlife to be considered by these assessments also include badgers, bats, otters, water voles, reptiles, great crested newts and dormice. Consideration is also being given to local vegetation, including hedgerows, trees and important habitats.

Our surveys and assessments will be verified and consulted on by Natural Resources Wales and the National Parks and Wildlife Service in Ireland. Consideration is also being made of local vegetation, including hedgerows, trees and important habitats.

Historic environment

The potential effects of Greenlink on local archaeology and cultural heritage will be assessed by seeking to identify, predict and evaluate the significance of potential effects on designated and non-designated heritage assets.

To mitigate any potential impacts, Greenlink will consider the predicted impacts of the proposed scheme and will aim to avoid adverse effects. Wherever possible, mitigation will be designed to deliver benefits, such as enhancing the visual setting of historic assets.

Greenlink will aim to avoid undisturbed archaeological remains and preserve them in situ. Where this is not possible, preservation by record will be proposed as mitigation.

Landscape & visual impact

This assessment relates to changes in the physical landscape, brought about by the proposed development, which may alter its character and how this is experienced.

Greenlink will produce visualisations of the converter stations from viewpoints that will be selected to represent the character of the area and particularly important landscape and heritage sites. Suitable mitigation, such as landscaping, building finishes and design layout, will be proposed.

Flooding and hydrology

This assessment considers the existing surface and ground water resources in the proximity to Greenlink. It will assess potential impacts to water bodies, surface water drainage and flood risk due to the proposed scheme during the construction and operational phases. The results of this assessment will be incorporated into the final design.

Geology & hydrogeology

This assessment considers the existing ground conditions present in the vicinity of the various scheme components and addresses the potential effects that the construction and operation of the project may have on the geological and hydrogeological characteristics of the study area.

ILLUSTRATION: WSP

The assessment will include consideration of possible effects on the superficial geology (soils), solid geology and geomorphology, including mineral resources beneath the proposed route of the scheme. The groundwater beneath the site and surrounding area will be considered. The results of this assessment will be incorporated into the final design and delivery of the proposal to mitigate any potential impact.

ILLUSTRATION: WSP

Noise & vibration

This assessment will address potential noise and vibration impacts from the construction and operational phases of the project, and specifically construction noise, construction vibration and operational noise from the converter station. The baseline conditions (i.e. existing background noise levels) at noise-sensitive receptors will be determined via noise surveys.

Noise sensitive receptors include residential properties, sensitive commercial and community uses (including educational premises, medical facilities, places of worship, etc) and open public spaces (including public footpaths).

The results of this assessment will be incorporated into the final design.

Traffic & transport

The traffic impact assessment will address the traffic impacts on the local road network from the construction and operation of the Greenlink project.

The assessment will include the supply of materials, plant and equipment, the cable laying operations and the various components of the converter station. Traffic arising from the construction and operations workforce will also be addressed.

A Transport Assessment or Transport Statement will be produced in accordance with best practice.

As part of the planning application process a Traffic Management Plan (TMP) will be put together that will outline measures for managing and mitigating the construction traffic caused by Greenlink. Greenlink will consult the local community on a draft TMP to ensure that all considerations of local amenity have been incorporated and that members of the local communities are satisfied with the mitigation measures being proposed.

Electromagnetic fields (EMFs)

The Greenlink electrical infrastructure (converter station and underground cables) will be designed to comply with the EC Directive relating to Occupational Exposure to Public Health and the EU 1999 recommendation on Public Exposure.

Use of agricultural land

Construction of the converter station will result in the permanent loss of land from agricultural use. Land disturbed during the construction of the landfall and cable will be reinstated and therefore there will be no permanent loss of agricultural land associated with the landfall or cable route.

Socio-economics & human health

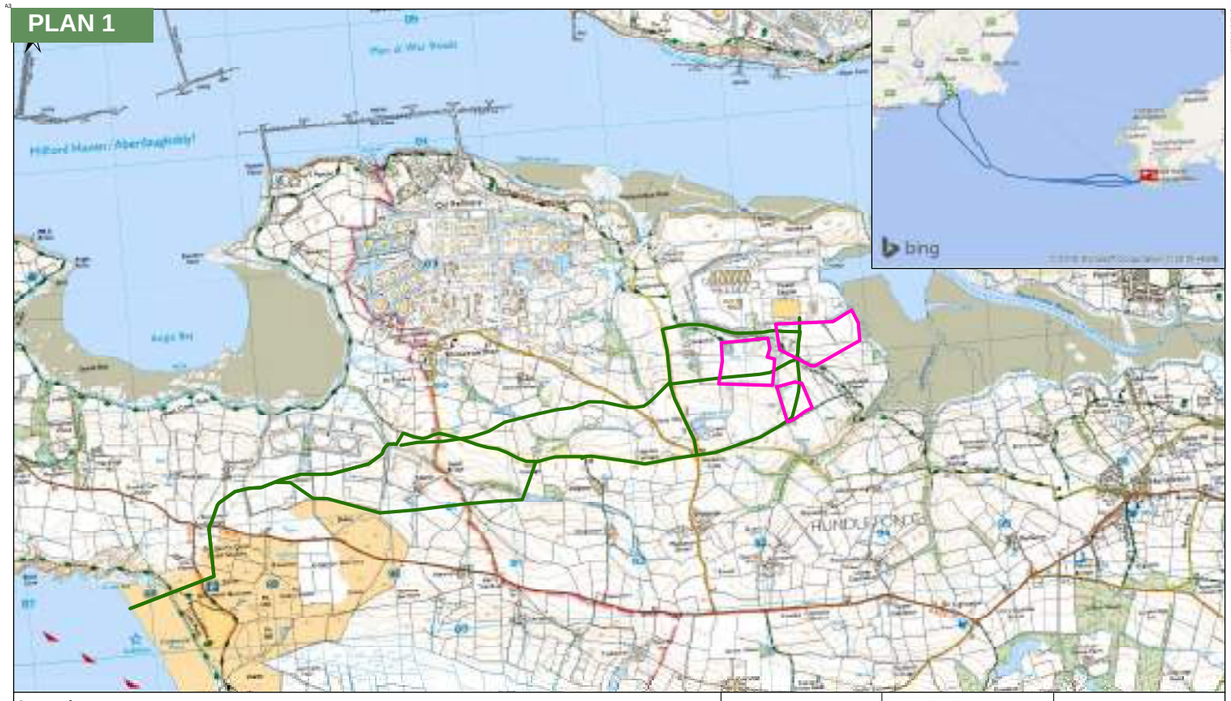
This study will provide an overview of the socio-economic conditions in the area of the proposed development and an assessment of potential effects on the population and human health derived from the implementation of the project. This will encompass consideration of population and demographic data, employment data and the volume and value of tourism to the local economy. The results of this assessment will be incorporated into the final design and delivery of the proposal to mitigate any potential impact and maximise benefits.

Air quality & climate change

This assessment considers the potential impacts on air quality during construction, including dust emissions, on- site machinery and construction traffic travelling to and from the site. The potential impacts on air quality during the operational phase will also be addressed.

Following the assessment of air quality effects during the construction phase, mitigation measures will be recommended to minimise the impact from dust. These measures, including dust suppressant measures, will be considered for both human and ecological receptors.

PLAN 1



Legend

- UK Onshore Converter Station Site Options
- UK Onshore Route Options

Kilometers 0 0.15 0.3 0.6

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Co-financed by the Connecting Europe Facility

P1	11.05.2018	RC	DG	MD
Issue	Date	By	Chkd	Appd

ARUP
One Albert Quay
Cork, T12 X8N6
Tel +353 (0)21 4223 200
www.arup.com

Client: **Greenlink Interconnector Ltd.**

Job Title: **Greenlink Interconnector**

UK Onshore Overview

Scale at A3: **1:25,000**

Job No: **246369-00**

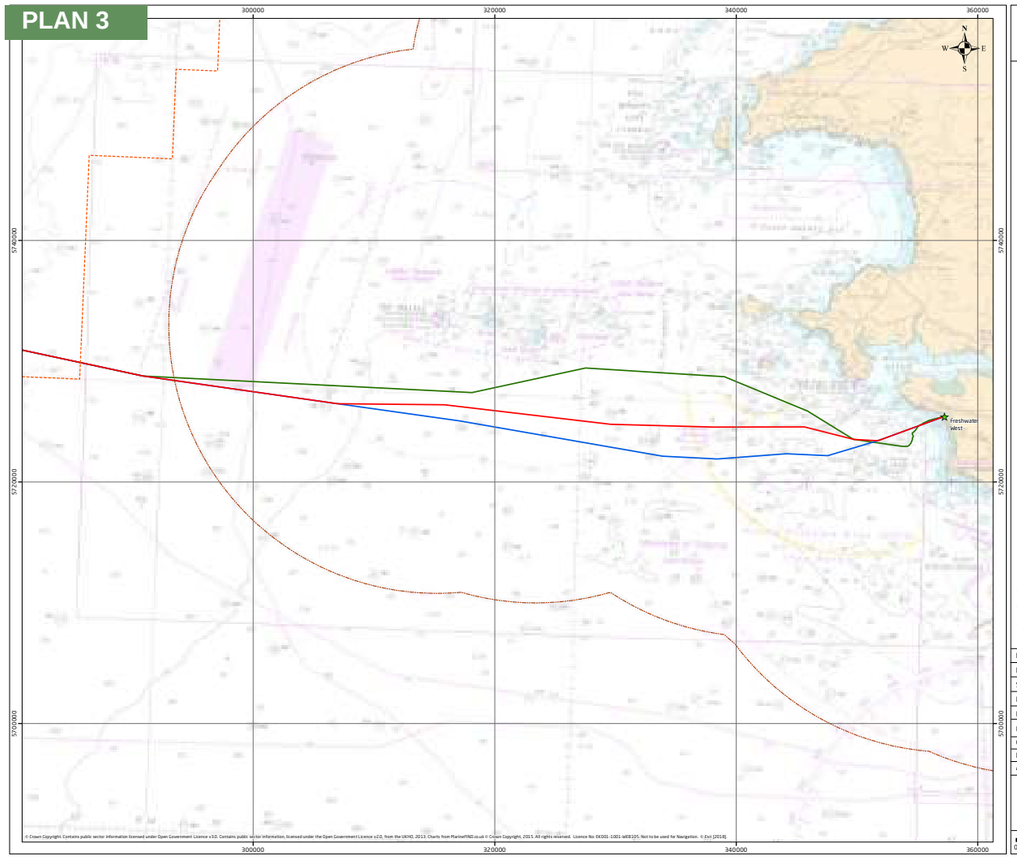
Drawing Status: **Preliminary**

Drawing No: **PC003**

Issue: **P1**

MXD Location: \\globaleurope\Cork\Jobs\246000\246369-00\4. Internal\4-03 Design\4-03-03 Infrastructure\01 GIS\04_Map Documents\PC_Public Consultation\Public Consultation.mxd

PLAN 3



GREENLINK INTERCONNECTOR

Route Options in Welsh Territorial Waters

Legend

- Landfall Option
- Median Line
- 12nm Territorial Sea Limit

Greenlink Proposed Route Option

- Route A Rev 0
- Route B Rev 0
- Route E Rev 1

NOTE: Not to be used for Navigation

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Date	Thursday, May 10, 2018 15:34:58
Projection	WGS_1984_UTM_Zone_30N
Spheroid	WGS_1984
Datum	D_WGS_1984
Data Source	CDA, UKHO, ESRI, MARINEFIND
File Reference	J:\P1975\Mxd\Public_Exhibitions\ Offshore_Wales_Route_Options_A2.mxd
Created By	Jennifer Arthur
Reviewed By	Richard Marlow
Approved By	Anna Farley

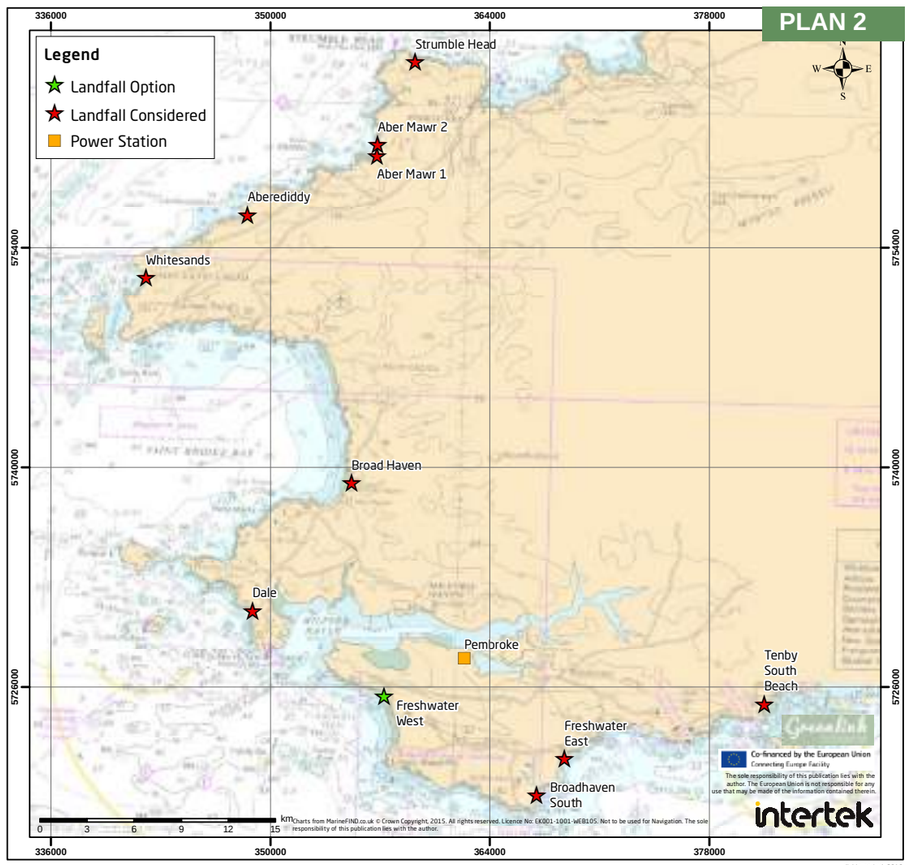
Greenlink

Co-financed by the European Union Connecting Europe Facility

intertek

0 2.5 5 7.5 10 km

PLAN 2



Greenlink

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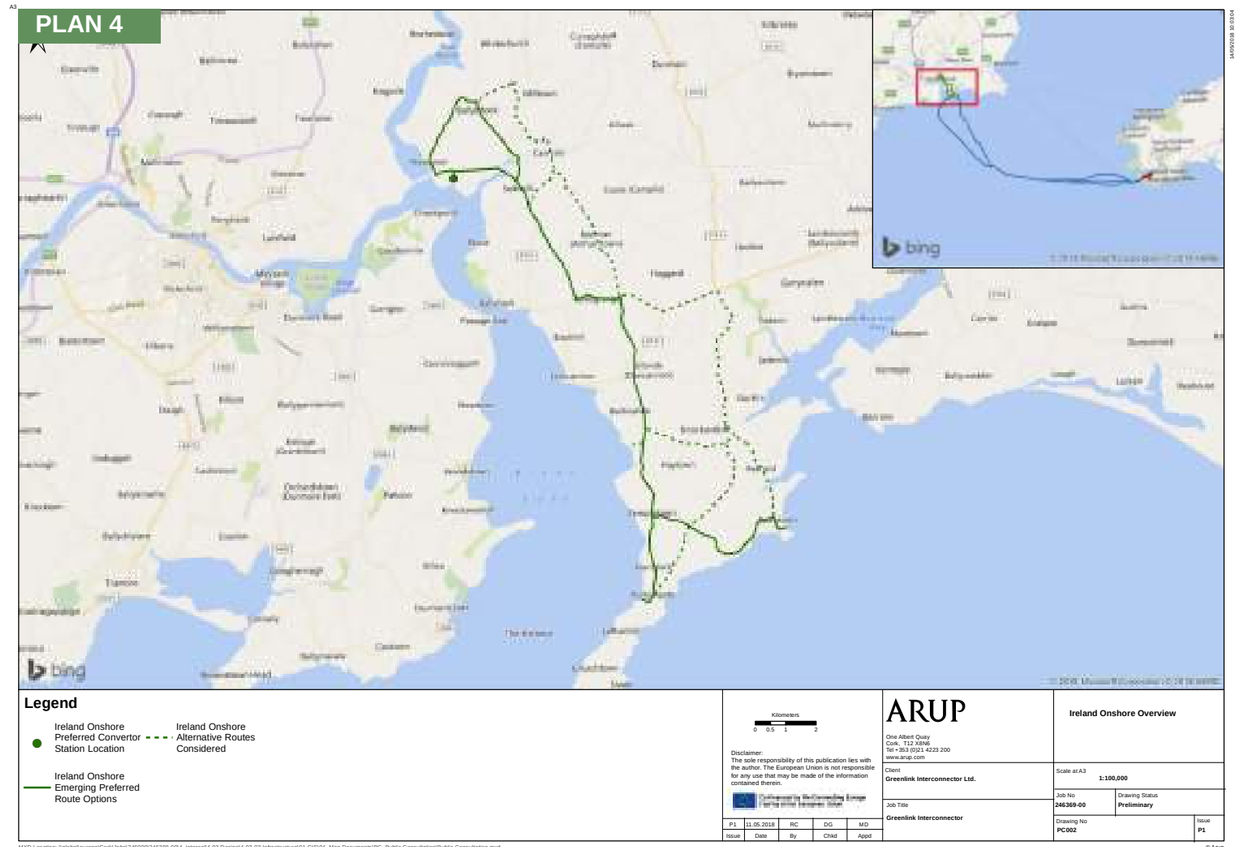
intertek

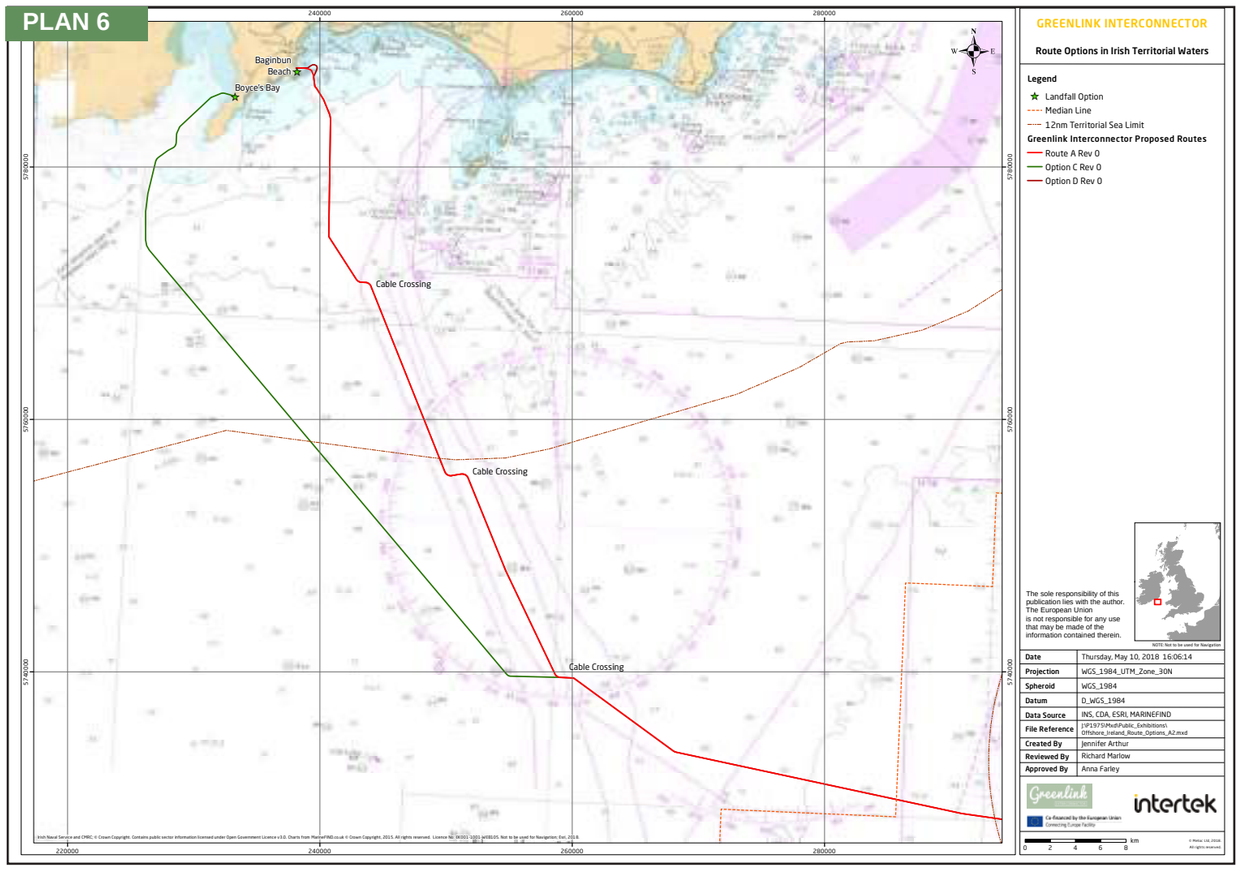
In Wales, Greenlink will connect to the Pembroke 400kV substation in Pembrokeshire. The substation at Pembroke was identified as the connection point for Greenlink following the completion of assessments and consultation with National Grid. AC cables will connect the HVDC converter station to the substation. Three sites, in close proximity to the substation, are currently being assessed as potential locations to locate the HVDC converter station. The sites under investigation are shown in Plan 1 along with potential onshore underground cable routes linking the proposed landfall site at Freshwater West with the converter station sites.

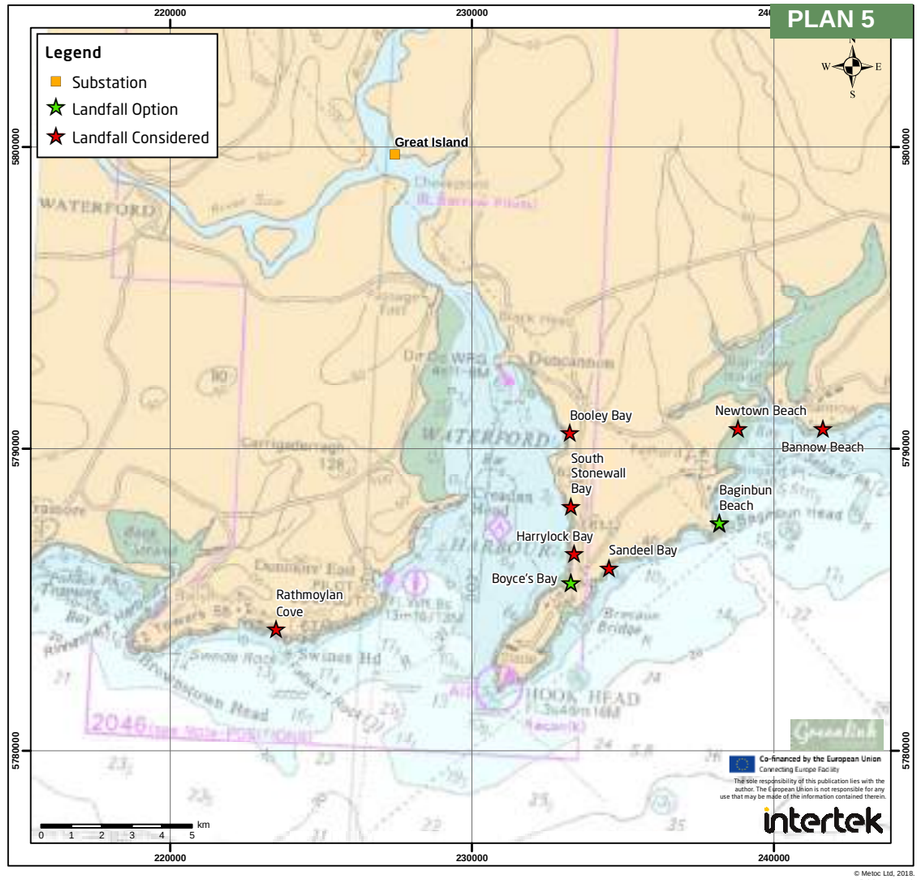
The final converter station site and cable route will be selected following environmental and technical assessments and consultation with key stakeholders. The length of the onshore cable route could be circa. 7km. The landfall at Freshwater West was selected following a review of potential landfall sites in the region. The landfalls assessed are shown in Plan 2.

It is currently proposed that the cables between the landfall and the sea will be installed using a Horizontal Directional Drill (HDD) underneath the dunes and beach at Freshwater West. HDD is a trenchless method of installing underground cables. Further technical assessment work will be undertaken before the installation methodology is finalised.

There are currently three subsea routes being assessed off the Welsh coast. The routes under assessment are shown in Plan 3. The final route will be selected following the conclusion of subsea surveys and consultation with stakeholders.







In Ireland, Greenlink will connect into the Great Island 220kV substation in County Wexford. The substation at Great Island was identified as the connection point for Greenlink following the completion of assessments and consultation with EirGrid. A high voltage AC conductor will connect the HVDC converter station to the substation. A site adjacent to the substation is currently being assessed as a potential location to locate the HVDC converter station. The site under investigation is shown in Plan 4 along with potential onshore underground cable routes linking the two potential landfall sites, at Boyce's Bay and Baginbun Beach.

The final converter station site and cable route will be selected following environmental and technical assessments and consultation with key stakeholders. The length of the onshore cable route could be circa. 28km.

The landfalls at Boyce's Bay and Baginbun Beach were selected for further investigation following a review of potential landfall sites in the region. The landfalls assessed are shown in Plan 5.

It is currently proposed that the cables between the landfall and the sea will be installed using a Horizontal Directional Drill (HDD) underneath the cliff edge and beach at both potential landfalls. Further technical assessment work will be undertaken before landfall site and installation methodology are finalised.

There are currently two subsea routes being assessed off the Irish coast. The routes under assessment are shown in Plan 6. The final route will be selected following the conclusion of subsea surveys and consultation with stakeholders.

Technical viability
Marine surveys are taking place in the summer of 2018 and will include geophysical and geotechnical surveys.

Geophysical
The geophysical survey will look to map the seabed and sub-surface geology along the proposed routes to identify marine habitats, optimise cable routing within the survey corridor and to enable assessment of cable target burial depth along the route. It will also look to provide the geophysical data from which a marine archaeological assessment can be undertaken as part of the consenting process.

Geotechnical
The purpose of the geotechnical survey is to evaluate the nature and mechanical properties of the seabed and intertidal sediments along the survey corridor. This will be done using a number of techniques, including drilling boreholes and digging trial pits.

Environmental impacts
The initial marine survey aims to map the distribution and extent of marine habitats within the proposed cable corridor. Data from this survey will then be used to inform the environmental assessment.

Marine environmental assessments
Greenlink will cross a number of European Marine Protected Sites; Special Areas of Conservation designated for the protection of habitats and species, and Special Protection Areas designated for the protection of wild birds. To determine if the project is likely to have a significant effect on the conservation objectives of the sites, Habitat Regulations Assessment will be carried out. The process identifies any potential impacts the project may have on the site and assesses whether it is likely that the feature of the site will be affected. Where the project is likely to undermine the conservation objectives of the site e.g. it is possible that condition, characteristics, or distribution of the feature cannot be maintained, then mitigation measures are proposed to manage or reduce the potential negative impacts identified.

In accordance with best practice, Environmental Reports will be completed for the marine components of the project in both the Ireland and Wales. The Habitats Regulation Assessment will form part of this larger environmental appraisal.

Topics covered by the environmental assessment will include:

- Coastal processes
- Protected sites
- Benthic ecology
- Fish and shellfish
- Marine birds
- Marine mammals and reptiles
- Marine archaeology and unexploded ordnance
- Fisheries
- Shipping and navigation
- Recreation and other sea users
- Cumulative effects

The potential impacts to be assessed include:

- Penetration and/or disturbance of the substrate below the surface of the seabed and effects on benthic communities and fish spawning
- Disturbance e.g. to birds, fish and marine mammals
- Transient underwater noise changes because of cable installation equipment and project vessels
- Temporary siltation rate changes from trenching activity
- Permanent, local, hydrological changes resulting from cable protection rock berms
- Physical loss (permanent change) of localised areas of marine habitat
- Localised electromagnetic changes and potential effects on fish, marine mammals and shipping
- Temporary, localised displacement of fishing activity and disruption to shipping routes.
- Possible in-combination effects

Most of the environmental impacts from cable installation are temporary and transient. For example, temporary disturbance of sea birds through the presence of project vessels, temporary increases in suspended sediment levels associated with trenching.

Steps are taken during the design of the project to ensure that environmental impacts are minimised where possible e.g. HDD under sensitive coastal features, routing around sensitive offshore habitats, avoiding known marine archaeology features such as wrecks. Best practice will also be followed to further reduce the significance of any potential impacts.

The proposed cable route crosses two Special Areas of Conservation which protect stony and bedrock reef. High resolution bathymetry data has been obtained by Greenlink in nearshore areas to assist routeing through features.

The proposed marine survey will also provide essential information to assist in confirming the presence/absence of features offshore, allow routeing around and if possible through features e.g. using sand channels between patches of reef, and in identifying suitable installation techniques that minimise effect on the habitat.

Mitigation
Where a potential impact is established, the environmental appraisal will recommend mitigation measures to be taken to reduce or remove the significance of the effect. Suitable mitigation will be established through consultation with stakeholders.

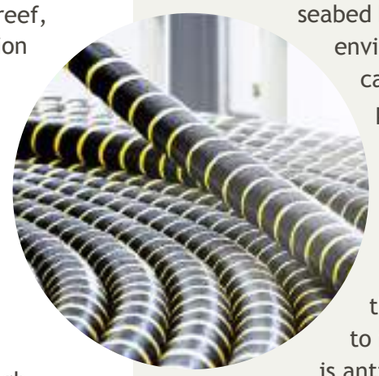
Greenlink will use high voltage direct current voltage source converter (HVDC VSC) technology to link the two power systems. HVDC has been selected over an AC connection, because AC is technically difficult over this distance. VSC technology has the main benefit that it reduces the size of the converters (when compared to similar technologies).

The Greenlink Interconnector converter station
The indicative converter station site footprint would be circa. 1.85 hectares (185m x 100m).

A converter station consists of various components. These include a converter hall, converter transformers, AC switchgear and busbars, harmonics filters, lightning towers, ancillary plant such as cooling bank and diesel generators, and a control building. Typically the tallest components are the lightning towers at circa 26 metres high and the converter hall, which could be up to 21 metres high at its apex. The converter hall and main building are usually one continuous building with height difference. The layout of the converter station and final dimensions will depend on the local terrain, physical constraints, the results of environmental surveys, consultations and the supplier's technical requirements.

OFFSHORE CABLES
Approximately 170km of the Greenlink cable route will be laid offshore. The final routes will be selected following a detailed assessment of the marine environment and technical challenges.

The cables will predominantly be buried in the seabed however where the geology or marine environment does not lend itself to this a cable may be laid on the seabed with protection added. Protection could be in the form of concrete mattress or rock dumping on top of the cable.



ONSHORE CABLES
One of the benefits of HVDC cables is the relatively small footprint required to install them underground onshore. It is anticipated that the Greenlink onshore cables will be buried within the road network or in private or agricultural land as appropriate.

PHOTOS - TOP: SIEMENS. BOTTOM: ABB

Onshore cable technology and installation techniques

The two onshore HVDC cables will be buried underground in a single trench with a typical depth of cover of 850mm. These will be installed in plastic duct to simplify the construction process. It is usual for the two ducts to be positioned close together (approximately 300mm). A protective cover and warning tape will also be buried along with marker posts at regular intervals at ground level.
This arrangement is shown in Figure 1.

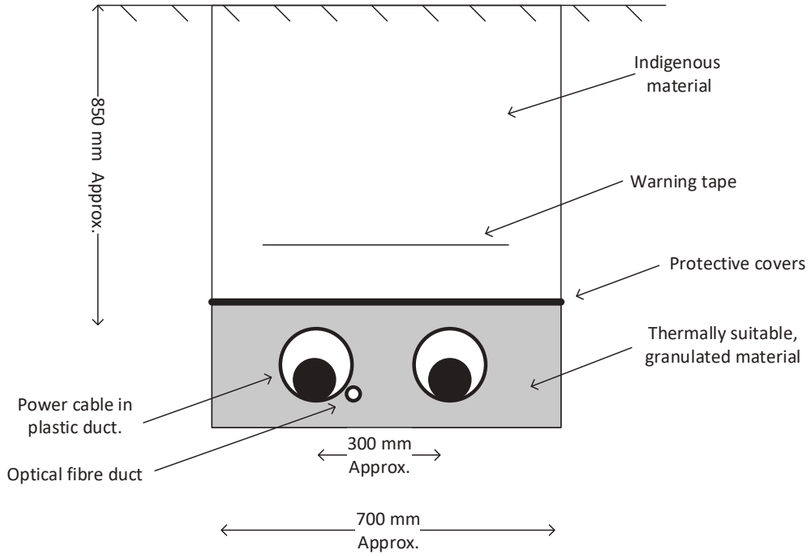


Figure 1 - Indicative underground cable arrangement

It is usual to increase the depth of cover in agricultural land to around 1050mm (increase from 850mm). The width of the trench may also vary with depth of cover (the deeper the cables are buried the wider the trench may become). A specific design would need to be engineered for utility crossings, crossing watercourses or other areas where the ordinary depth of cover cannot be achieved.

PHOTO: Deep Ocean

Onshore Cable Installation

PHOTOS: WSP

Project Timeline

A large infrastructure project such as Greenlink takes several years from concept to construction, including technical design, obtaining the relevant permits and consultation with a variety of stakeholders.

Technical and environmental constraints have to be identified and fully assessed to ensure that they are considered within the final design of an infrastructure project. Detailed environmental and technical assessment surveys commenced in 2018. This follows the completion of desk-based assessments and consultation with statutory consultees. Once a detailed proposal and design are completed, permits and licences will need to be obtained from: Pembrokeshire County Council, Natural Resources Wales (NRW) and Milford Haven Port Authority, in Wales; and An Bord Pleanála and the Department of Housing, Planning and Local Government – Foreshore Unit and the Commission for the Regulation of Utilities, in Ireland.

Once the appropriate permits and licences have been obtained, the scheme will be constructed, which is expected to be approximately 36 months from start to finish.

The project is envisaged to commence on-site construction in 2020 and be fully operational in 2023.

An important energy infrastructure project

The “Energy Union” launched by the European Commission on 25th February 2015 is driving a fundamental transition towards more innovative ways to produce, transport and consume energy, and to address different approaches to the design and implementation of energy policy.

Facilitating the Union requires a range of actions, chief amongst them being an increase in the physical interconnectedness of the EU and surrounding country energy grids (both gas and electricity) to meet a 10% interconnection target by 2020 and to reach 15% by 2030.

An interconnected European energy grid is vital for Europe’s energy security, for more competition in the internal market resulting in more competitive prices as well as for better achieving the decarbonisation and climate policy targets that the European Union has committed to. An interconnected grid will help deliver the ultimate goal of the Energy Union, i.e. to ensure affordable, secure and sustainable energy, and also growth and jobs across the EU.

Greenlink has been given the status of a European Union Project of Common Interest (PCI), making it one of Europe’s most important energy infrastructure projects.

- For information regarding the infrastructure transparency platform referred to in Article 18 of the TEN-E Regulation, please visit: http://ec.europa.eu/energy/infrastructure/transparency_platform/map-viewer/main.html
- For information regarding the manual of procedures for each of UK and Ireland https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/311184/uk_manual_procedures_ten_e_regulation.pdf and www.pleanala.ie/publications/2014/pocimanual.pdf

Greenlink

INTERCONNECTOR

GREENLINK INTERCONNECTOR LIMITED

The Greenlink Interconnector is being developed by Greenlink Interconnector Limited.

Greenlink Interconnector Limited is 100% owned by Element Power Holdings, a leading global developer of renewable energy, energy storage, flexible generation and interconnection projects.

Element Power has significant experience in developing energy infrastructure projects, with established teams of experienced engineers, environmental and financial professionals covering both the UK and Ireland.

For more information on Greenlink, please visit our website: www.greenlinkinterconnector.eu

For more information on Element Power, please visit our website: www.elpower.com

elementpower

Version 1 | May 2018

4.6 APPENDIX 6 – PUBLIC EXHIBTION BOARDS (WALES)

WELCOME TO THE EXHIBITION

Greenlink
INTERCONNECTOR

Welcome

Welcome and thank you for taking the time to come to the first public exhibition for the Greenlink Interconnector project (Greenlink).

We have prepared the information on display here today to help you find out more about our work on Greenlink.

Members of the project team are here to answer your questions.

About the developer

Greenlink is being developed by Greenlink Interconnector Limited. Greenlink Interconnector Limited is 100% owned by Element Power Holdings, a leading global developer of renewable energy, energy storage, flexible generation and interconnection projects.

Element Power has significant experience in developing energy projects, in the UK and Ireland.

For more information on Element Power, please visit our website: www.elpower.com

Your Views

We are very interested to hear your views, so please feel free to fill in a comments form and drop it in the box provided before you leave

For more information please visit:
www.greenlinkinterconnector.eu

elementpower

PROJECT BENEFITS

Greenlink
INTERCONNECTOR

380,000
Potential to power 380,000 homes*

£350m
of private capital investment for Ireland and Wales

Energy
Supports the growth and integration of low carbon energy

Security
Enhances the security of supply for electricity consumers

Value FOR Money
Downward pressure on electricity bills

Jobs
Jobs and knock-on economic benefits during construction

Inward investment and jobs
Greenlink represents c£350m of private capital investment in Ireland and Wales and will create jobs during construction and operation as well as knock-on economic benefits.

An integrated European grid
Interconnection has a vital role to play in connecting energy generation between countries to provide reliable and affordable power for all. Greenlink will have strategic importance, by doubling the interconnection capacity between Ireland and GB and contribute to each country's interconnection targets.

Security of supply
Greenlink will deliver increased security of supply for electricity consumers, by diversifying energy sources and providing additional import and export capacity in both countries.

Integration of renewable energy
Greenlink improves the integration of renewable technologies in Ireland and GB supporting the growth of the green energy sector, which offers significant economic and environmental benefits to both countries.

Better energy price competition
Greenlink will deliver greater market integration and competition in the provision of electricity, ultimately providing significant benefits to consumers in Ireland, GB and continental Europe.

Benefits for Wales and Pembrokeshire
Greenlink will provide additional transmission network capacity, reinforcing electricity grid in southern Wales. It will also offer valuable inward investment to Wales and Pembroke, including jobs and knock-on economic benefits during construction.

For more information about opportunities for local businesses, please see our 'Local Supply Chain' board later in this exhibition

*Figure for number of homes is based on typical annual household use of 4,200 kWh (CER, Review of Typical Consumption Figures – Decision Paper 12 March 2017 (CER17042) and estimated total flows from UK to SEM of 1,600,000 MWh/yr.

WALES

250
jobs in Wales during construction

Jobs
5 permanent Welsh jobs

Grid
Reinforce electricity grid

THE PROPOSAL

Greenlink is a proposed 500 megawatt (MW) subsea and underground cable electricity interconnector (with associated converter stations) between the existing electricity grids in Ireland and Great Britain, allowing for electricity to flow both ways between the two countries. The project will provide a new grid connection between EirGrid's Great Island substation in County Wexford (Ireland) and the National Grid's Pembroke substation in Pembrokeshire (Wales).

Greenlink will have key strategic importance, as it will provide significant additional interconnection capacity between Ireland, GB and continental Europe. The construction and development of Greenlink will deliver increased energy security, inward investment and value for money for consumers and enable the further integration of low carbon renewable energy sources.

Greenlink has been awarded Project of Common Interest (PCI) status, making it one of Europe's most important energy infrastructure projects and granting it the "highest national significance" possible.

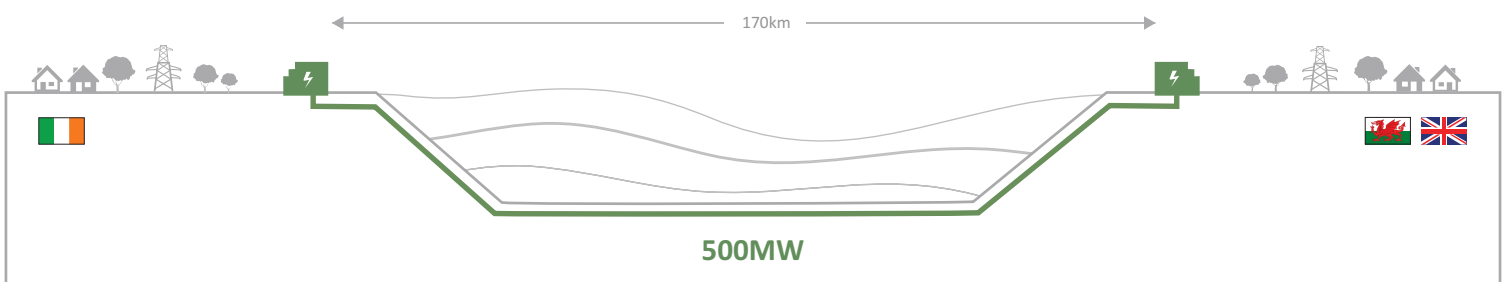
Greenlink will consist of two converter stations, each located close to the identified existing substations: Great Island Substation in County Wexford (Ireland) and Pembroke Substation in Pembrokeshire (Wales).

The converter stations will be connected to each other by two electricity cables and a fibre optic cable that will enable the two converter stations to communicate for control purposes.

There will be no overhead lines between the two converter stations and the respective substations. Onshore the cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

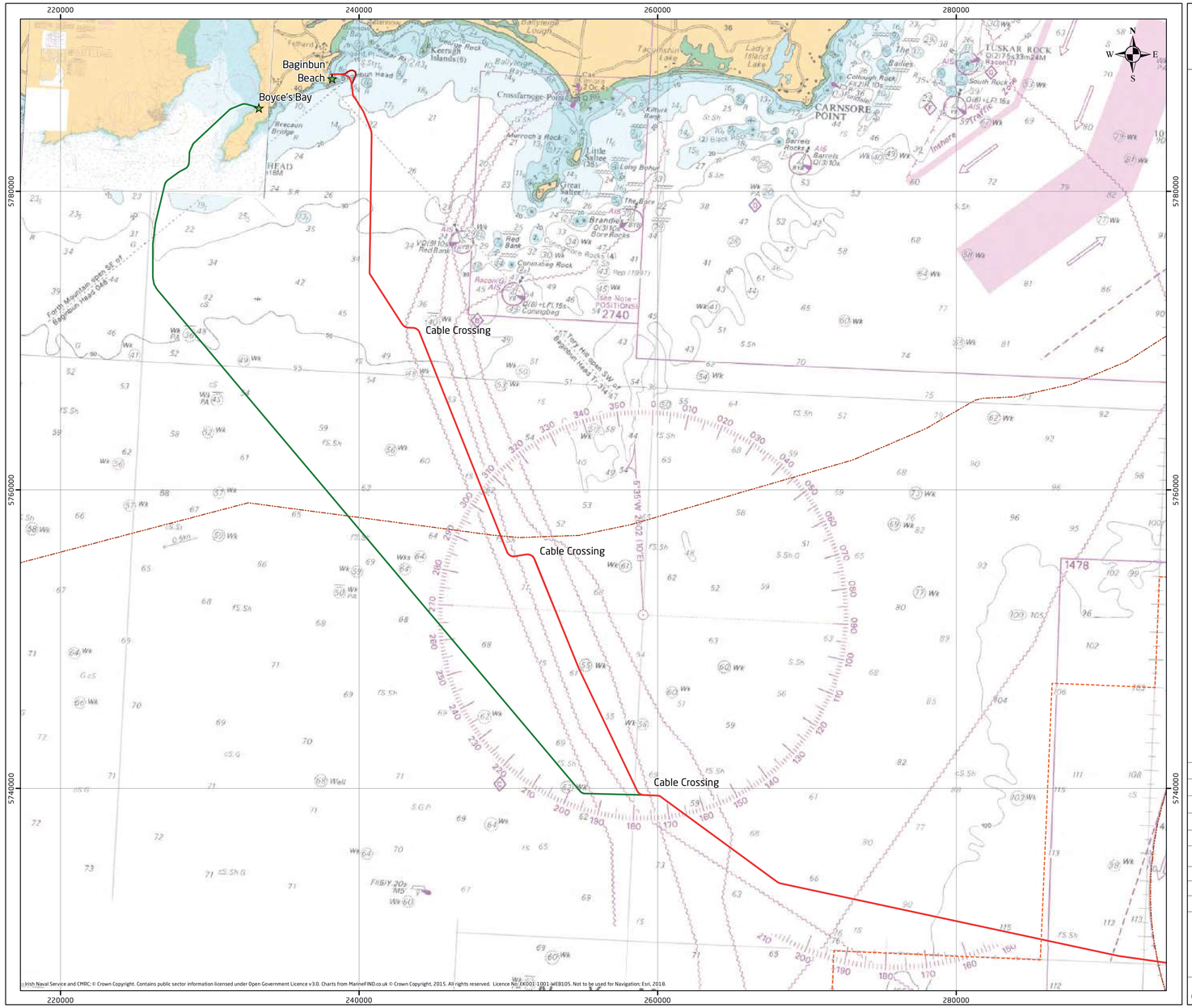
The project will require planning permission in Ireland and Wales. Constructing and commissioning an interconnector requires the completion of a thorough programme of environmental and technical assessment to ensure that the final interconnector design fully considers the environment in which it is built. The Greenlink interconnector is planned for commissioning in 2023.

Sources: Ofgem, TEC Register, 3rd PCI, TYNDP 2016w



OFFSHORE IRELAND ROUTE OPTIONS

Greenlink
INTERCONNECTOR



GREENLINK INTERCONNECTOR

Route Options in Irish Territorial Waters

Legend

- Landfall Option
- Median Line
- 12nm Territorial Sea Limit

Greenlink Interconnector Proposed Routes

- Route A Rev 0
- Option C Rev 0
- Option D Rev 0

NOTE: Not to be used for Navigation

Date	Thursday, May 10, 2018 16:06:14
Projection	WGS_1984_UTM_Zone_30N
Spheroid	WGS_1984
Datum	D_WGS_1984
Data Source	INS, CDA, ESRI, MARINEFIND
File Reference	J:\P1975\Mxd\Public_Exhibitions\ Offshore_Ireland_Route_Options_A2.mxd
Created By	Jennifer Arthur
Reviewed By	Richard Marlow
Approved By	Anna Farley

Co-financed by the European Union
Connecting Europe Facility

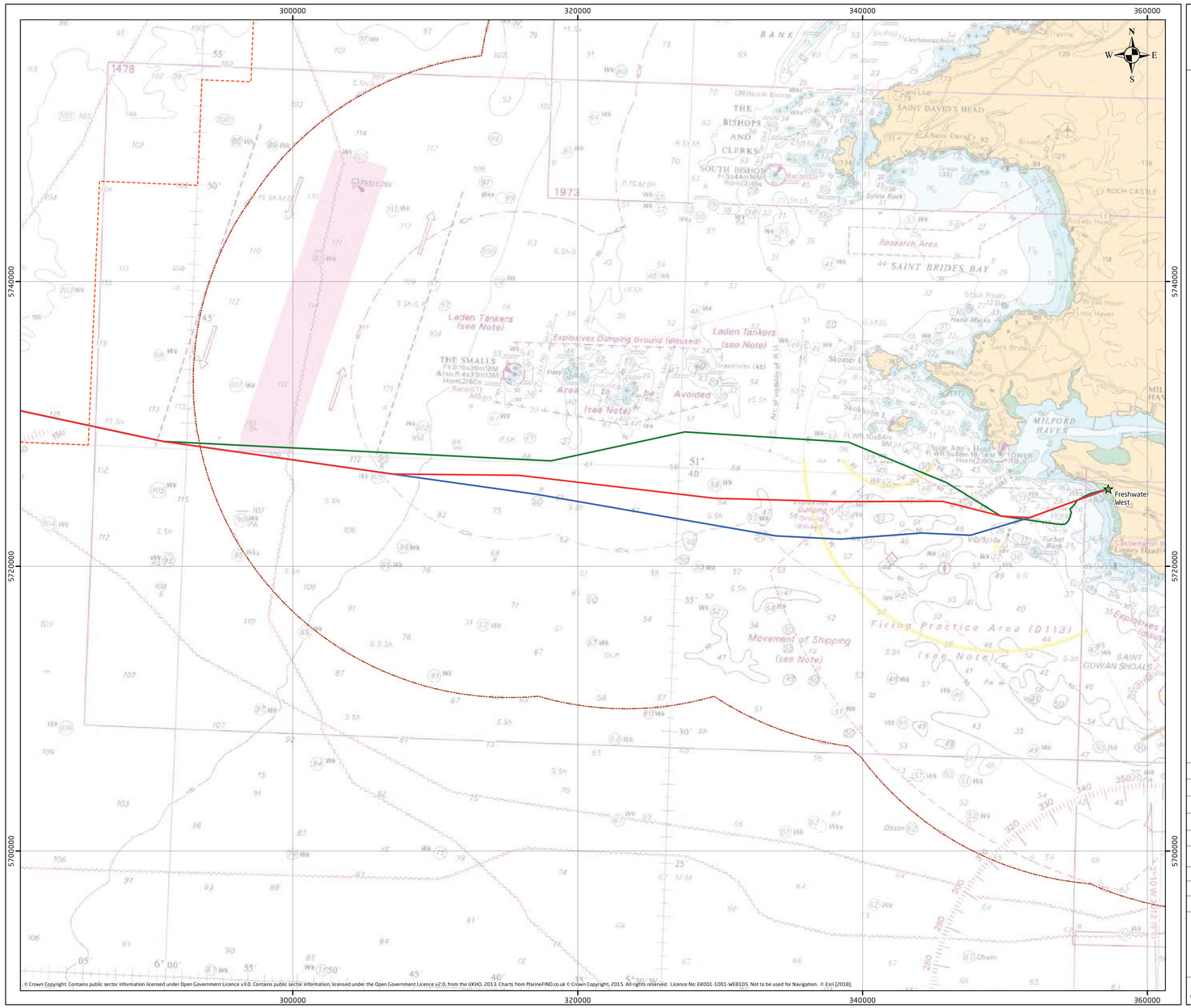
0 2 4 6 8 km

There are currently two subsea routes being assessed off the Irish coast. The routes under assessment are shown in this plan.

The final route will be selected following the conclusion of subsea surveys and consultation with stakeholders.

For more information please visit: **www.greenlinkinterconnector.eu**

OFFSHORE WALES ROUTE OPTIONS



GREENLINK INTERCONNECTOR

Route Options in Welsh Territorial Waters

Legend

- ★ Landfall Option
- Median Line
- 12nm Territorial Sea Limit

Greenlink Proposed Route Option

- Route A Rev 0
- Route B Rev 0
- Route E Rev 1

NOTE: Not to be used for Navigation

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Spheroid	WGS_1984
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Created By	Jennifer Arthur
Reviewed By	Richard Marlow
Approved By	Anna Farley

Co-financed by the European Union
Connecting Europe Facility

0 2.5 5 7.5 10 km

Greenlink
INTERCONNECTOR

There are currently three subsea routes being assessed off the Welsh coast. The routes under assessment are shown in his plan.

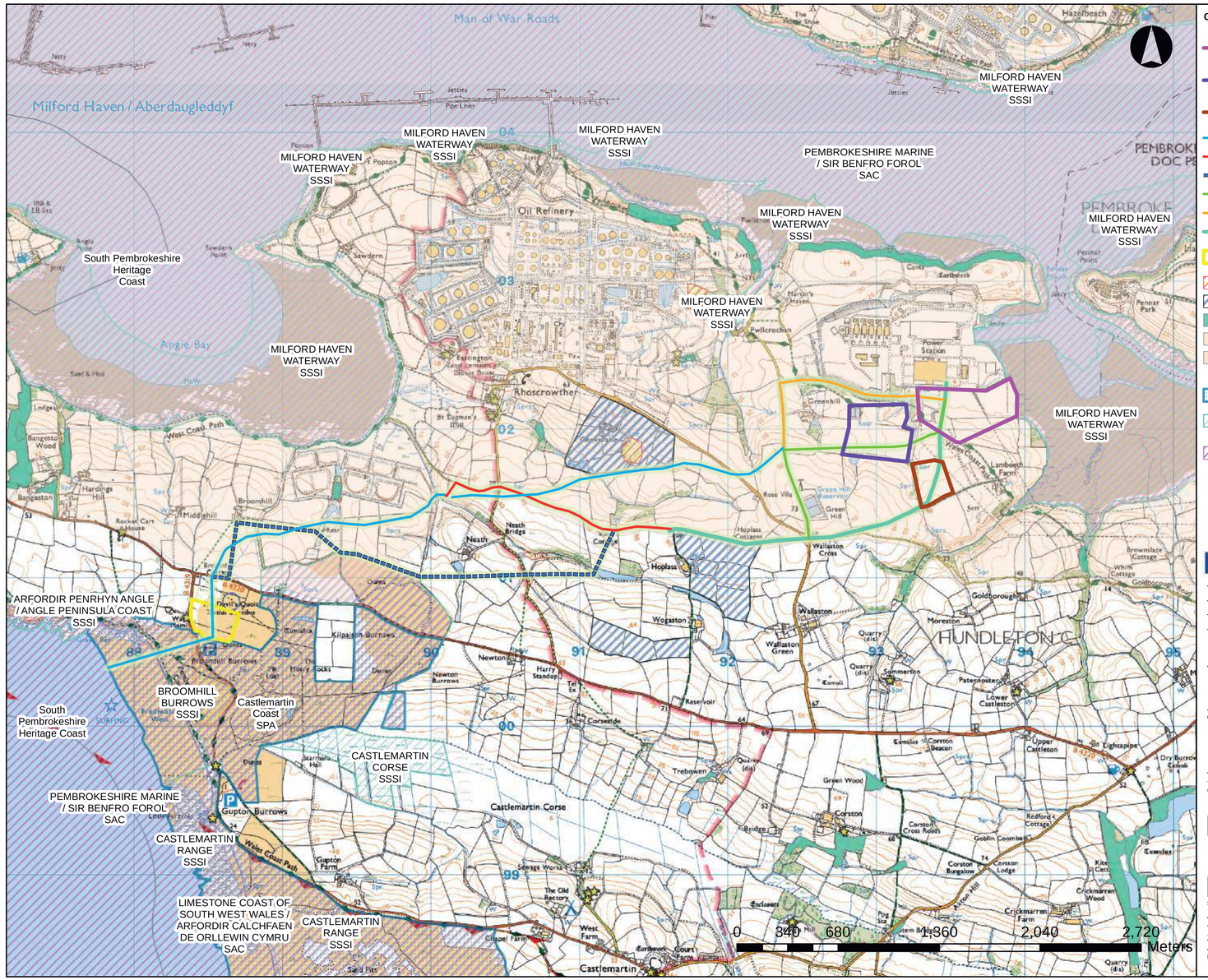
The final route will be selected following the conclusion of subsea surveys and consultation with stakeholders.

For more information please visit:**www.greenlinkinterconnector.eu**

OPTIONEERING PLAN - REGIONAL

Greenlink
INTERCONNECTOR

A3



Greenlink - Cable + Route Converter Station

- Converter Station Site Boundary Option 1
- Converter Station Site Boundary Option 2
- Converter Station Site Boundary Option 3
- Route Option 1
- Route Option 2
- Route Option 3
- Tie-In Option 1
- Tie-In Option 2
- Tie-In Option 3
- Freshwater West HDD Site Pembrokeshire
- Landfill
- Planning Applications
- Ancient Woodland
- Heritage Coasts
- Historic Landscape
- Listed Buildings
- Special Protection Areas (SPA)
- Sites of Special Scientific Interest (SSSI)
- Special Area of Conservation (SAC)

Greenlink INTERCONNECTOR

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Connecting Europe Facility

Issue	Date	By	Chkd	Appd
P0	2018-05-02	LL	TR	SB

2018-05-02

ARUP

Client: elementpower

Job Title: **Greenlink**

Optioneering Plan - Regional

Scale at A3

Job No	Drawing Status	Issue
246369-00	**Preliminary**	**P1**

Drawing No: **SK005**

10/05/2018 13:59:03

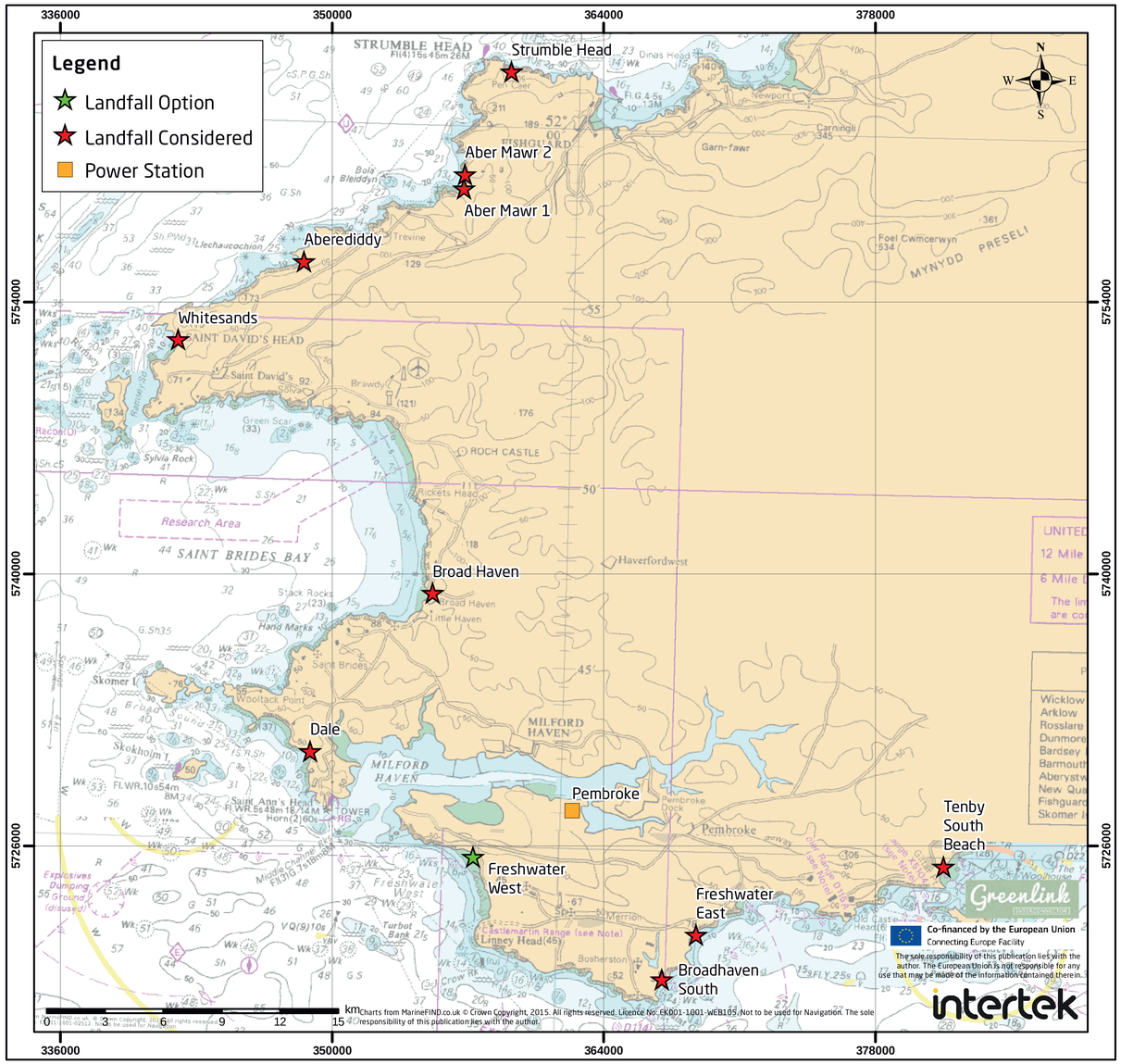
MXD Location: \\global\Europe\Cork\Jobs\246000\246369-00\4. Interim\4-03 Design\4-03-03 Infrastructure\01 GIS\04_Map Documents\ENV_Environment\UKMXDs\Pembrokeshire_env_constraints_link_MJ.mxd

Three sites, in close proximity to the substation, are currently being assessed as potential locations to locate the HVDC converter station. The sites under investigation are shown in his plan along with potential onshore underground cable routes linking the proposed landfall site at Freshwater West with the converter station sites.

For more information please visit: **www.greenlinkinterconnector.eu**

WELSH LANDFALLS

Greenlink
INTERCONNECTOR



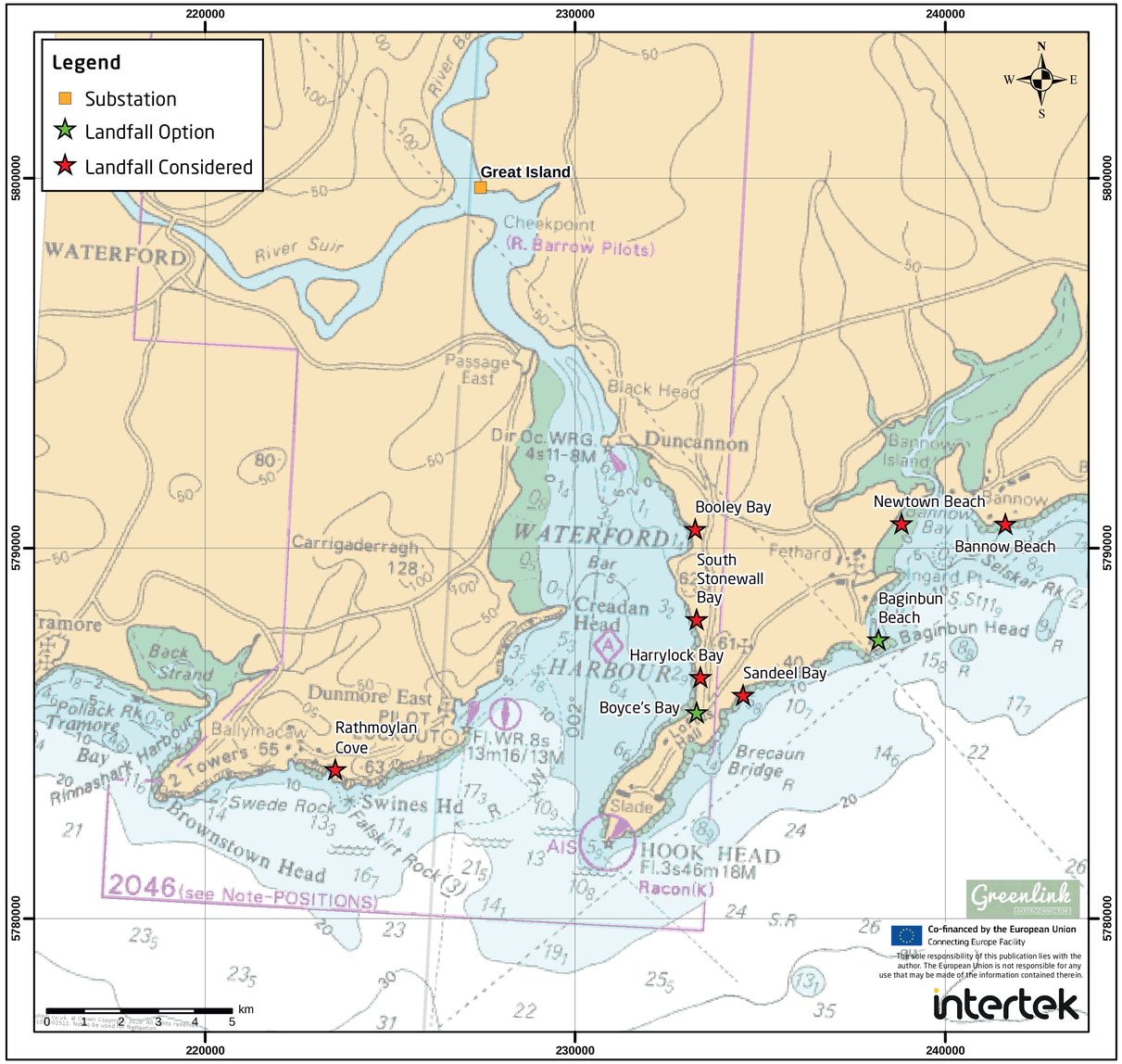
The final converter station site and cable route will be selected following environmental and technical assessments and consultation with key stakeholders. The length of the onshore cable route could be circa. 7km.

The landfall at Freshwater West was selected following a review of potential landfall sites in the region. The landfalls assessed are shown in this plan.

For more information please visit: **www.greenlinkinterconnector.eu**

IRISH LANDFALLS

Greenlink
INTERCONNECTOR



The final converter station site and cable route will be selected following environmental and technical assessments and consultation with key stakeholders. The length of the onshore cable route could be circa. 28km.

The landfalls at Boyce's Bay and Baginbun Beach were selected for further investigation following a review of potential landfall sites in the region. The landfalls assessed are shown in this plan.

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intertek

For more information please visit: **www.greenlinkinterconnector.eu**

WHY GREENLINK?

Greenlink
INTERCONNECTOR

Greenlink is a new 500 MW interconnector between Ireland and Wales

Great Britain is currently connected to the island of Ireland by two electricity interconnectors, which provide a means of transferring electricity between the two countries – the East West Interconnector (EWIC), which connects County Dublin to North Wales, and the Moyle interconnector between County Antrim, Northern Ireland and Ayrshire, Scotland.

However, the challenges faced by the British, Irish and wider European energy systems are driving the need for additional interconnectors between Great Britain and Ireland and within Europe as a whole. This will allow electricity to flow more easily between where it is generated and where it is needed, improving the security and reliability of our energy supplies and supporting the integration of greener, low carbon energy sources in an affordable way.

There is a strong need and significant support within Europe for additional interconnection. The 'Energy Union' is a strategy launched by the European Commission in 2015 with the aim of ensuring that European countries have access to secure, affordable and climate-friendly energy.

Greenlink has been given the status of a European Union Project of Common Interest (PCI), making it one of Europe's most important energy infrastructure projects.

{ supporting the integration of greener, low carbon energy sources in an affordable way }

Supporting Renewable Energy

Improving Energy Security

Fighting Climate Change

Benefitting Consumers

For more information please visit: **www.greenlinkinterconnector.eu**

GREENLINK COMPONENTS

Greenlink
INTERCONNECTOR

The key components of the scheme are:

- **Two converter stations** – one near the Great Island Substation in County Wexford (Ireland) and one near the Pembroke Substation in Pembrokeshire (Wales)
- **Two subsea HVDC cables and a fibre optic cable** – the onshore cables will be buried underground and offshore the cables will be buried in the seabed or laid on the seabed with protection, if burial is not practicable.

What is an HVDC cable?

- High Voltage Direct Current (HVDC) cables allow for efficient transportation of electricity over large distances and in particular for subsea cables.
- HVDC cables have lower electricity losses than comparable AC cables.
- HVDC cables are suitable for undergrounding both onshore and offshore. There will be no overground cables between the two converter stations.
- One of the benefits of HVDC cables is the relatively small footprint required to install them underground onshore.

PHOTO: ABB

What is a converter station?

A converter station converts electricity from Alternating Current (AC) to Direct Current (DC) and vice versa. DC electricity is used for the transmission of electricity over long distances between two converter stations and AC electricity is used within the national transmission and distribution networks.

What is a fibre optic cable?

A fibre optic cable is installed to provide communication between the converter stations for system monitoring and safety purposes.

For more information please visit: **www.greenlinkinterconnector.eu**

CONSULTATION

Public consultation is a core part of the development process and ensures that communities in the vicinity of a new proposal have timely and transparent access to information and can engage with developers to influence the final proposal coming forward. We would like to hear what your thoughts and views are on this proposal.

The Greenlink project team wants to ensure that the local community is consulted and involved throughout the development process of the interconnector project.

During the development process we will be looking to fully engage with local residents, councillors, businesses and members of the local community to discuss the proposal and any potential impacts and to obtain feedback on key issues.

We intend to make sure the local community can see that its views have been fully considered and incorporated within the final proposal.

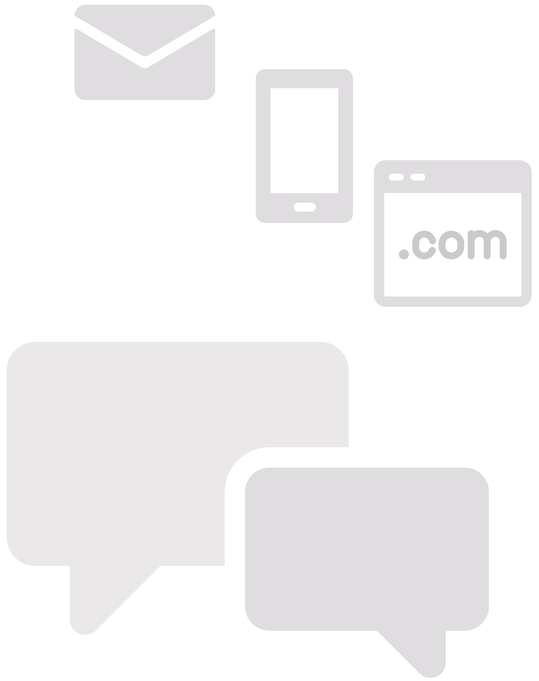
This public exhibition is to allow local residents and stakeholders to view our initial plans, share their views with us, meet the project team and ask questions. We would welcome any feedback that you have now or in the future.

Additional events will be held in due course as the project progresses.

Greenlink
INTERCONNECTOR

Contact details

If you would like the Greenlink team to keep you directly updated on project news and future consultation events, please leave us your name and contact details on the comment sheet provided.



For more information please visit:**www.greenlinkinterconnector.eu**

LOCAL SUPPLY CHAIN

Greenlink
INTERCONNECTOR

Greenlink is committed to maximising the use of locally-based contractors and personnel during the construction and operational phases of the project.

Construction work on Greenlink is expected to lead to significant expenditure in both Ireland and Wales. A significant amount of work is due to take place at the landfall, cable and converter station sites and will require skills and experience available from contractors found in the local area.

The types of services that could be locally sourced include:

- Transportation – equipment and personnel
- Materials, e.g. supplying and pouring concrete
- Electrical connection
- Hospitality and catering for civil engineering activities and earthworks.
- Office and cleaning supplies
- Site security
- Site services, e.g. portacabins and portaloos
- Fencing
- Waste disposal

Your Views

Do you know of a local business that could benefit from the Greenlink interconnector project?

Let us know if you want to be added to our list of local suppliers!

For more information please visit: **www.greenlinkinterconnector.eu**

SITE ASSESSMENT - OVERVIEW

Greenlink
INTERCONNECTOR

As part of the development process, a series of environmental and technical assessment studies are being carried out to establish the viability of all the proposed sites and cable routes and to consider any potential impacts and opportunities arising from the development.

Onshore studies include assessments on:

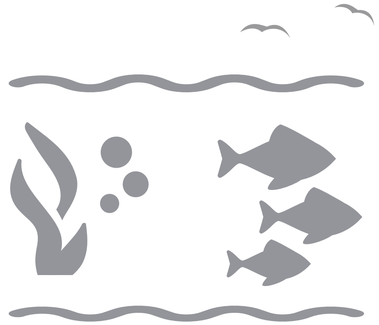
- Biodiversity
- Historic environment
- Landscape & visual impact
- Flooding & hydrology
- Geology & hydrogeology
- Noise & vibration
- Traffic & transport
- Electromagnetic fields (EMFs)
- Agricultural land
- Socio-economics & human health
- Air quality & climate change
- Cumulative & transboundary effects

Offshore studies include assessments on:

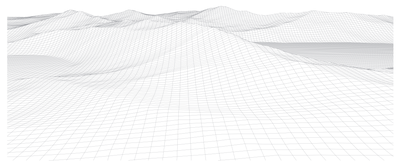
- Geophysical & geotechnical surveys
- Marine biodiversity (benthic/seabed environment, fish and shellfish, marine birds, marine mammals and reptiles etc)
- Protected designations
- Commercial fisheries
- Shipping & navigation
- Aviation & military
- Marine archaeology & UXOs

Further information on the nature of these assessments is available within the project Environmental Scoping documents.

Noise & vibration



Marine biodiversity



Landscape & visual impact

For more information please visit: **www.greenlinkinterconnector.eu**

LANDSCAPE & VISUAL IMPACT

Greenlink
INTERCONNECTOR

Landscape

This assessment relates to changes in the physical landscape, brought about by Greenlink, which may alter its character and how this is experienced.

Visual

Visual impact assessment relates to changes in the composition of views as a result of changes to the landscape, how these are perceived and the effects on visual amenity.

We will produce visualisations of the converter stations from viewpoints to be agreed with Pembrokeshire County Council. Viewpoints will be selected to represent the character of the area and particularly important landscape and heritage sites.

Impacts and mitigation

Converter station

A converter station consists of various components. These include a converter hall, converter transformers, AC switchgear and busbars, harmonics filters, lightning towers, ancillary plant and a control building.

Typically the tallest components are the lightning towers at circa 26 metres high and the converter hall, which could be up to 21 metres high at its apex. However, the layout of the converter station and final dimensions will depend on the local terrain, physical constraints, the results of environmental surveys, consultations and the supplier's technical requirements.

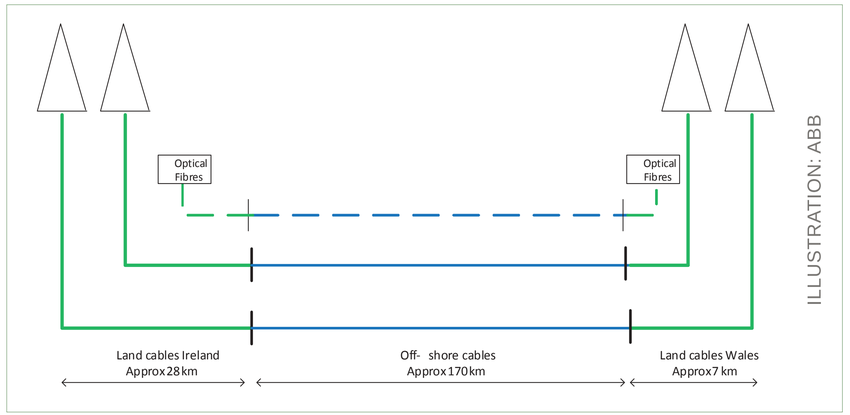
The landscape and visual impact of this will be carefully considered and suitable mitigation, such as landscaping, building finishes, among others, will be proposed.

Cable route

There is the potential for impact from the cable route from vegetation clearance during construction, particularly where the cable route diverges from the road network.

Landscape and visual impacts during cable installation are predicted to be minor and not significant due to the temporary and reversible nature of the change (vegetation clearance) which can be adequately mitigated through replanting.

Following installation and restoration there are not predicted to be any residual landscape and visual effects from the cable route.



Your views ... Do you have any suggestions for viewpoints to be assessed?
What sort of landscaping planting would you like to see in and around the converter station?

PHOTO: www.siemens.com/press

For more information please visit: **www.greenlinkinterconnector.eu**

WATER AND SOIL

Greenlink
INTERCONNECTOR

Flooding & hydrology

This assessment considers the existing surface and ground water resources in the proximity of Greenlink from the landfall in Freshwater West to the proposed converter station location.

It will assess potential impacts to water bodies, surface water drainage and flood risk due to Greenlink during the construction and operational phases.

Geology & hydrogeology

This assessment considers the existing ground conditions present in the vicinity of the various scheme components and addresses the potential effects that the construction and operation of the project may have on the geological and hydrogeological characteristics of the study area.

The assessment will include consideration of possible effects on the superficial geology (soils), solid geology and geomorphology, including mineral resources beneath the proposed route of the scheme. The groundwater beneath the site and surrounding area will be considered.

The assessment will also consider potential effects posed by any potentially contaminated land along the proposed route.

For more information please visit: **www.greenlinkinterconnector.eu**

NOISE & VIBRATION

Greenlink
INTERCONNECTOR

This assessment will address potential noise and vibration impacts from the construction and operational phases of the project, and specifically construction noise, construction vibration and operational noise from the converter station.

The proposed underground cable routes pass through predominantly rural areas which are likely to experience low ambient existing noise levels. The converter station locations are also located in a rural area but are all adjacent to an existing substation with its associated operating noise levels.

Noise surveys and assessment

- The baseline conditions (i.e. existing background noise levels) at noise-sensitive receptors will be determined via noise surveys.
- Noise-sensitive receptors include residential properties, sensitive commercial and community uses (including educational premises, medical facilities, places of worship etc) and public open spaces (including public footpaths).
- A study area of 300m around the cable route corridor and converter station locations will be considered for potential construction noise impacts and an area of 50m will be considered for potential construction vibration impacts.
- For operational noise, an assessment will be undertaken at sensitive receptors within 300m of the converter station.

Impacts and mitigation

The construction of the converter station has the potential to give rise to temporary noise and vibration impacts. However, given the distance between the converter station locations and sensitive receptors it is likely that any impact will be low.

The construction of the cable route has the potential to give rise to temporary noise and vibration impacts in isolated locations along the route, particularly where directional drilling is required at watercourses and road crossings.

There will be noise from the electrical and mechanical plant during the operation of the converter station, most of which will be located indoors in the converter hall.

Your views

Do you have concerns regarding noise and vibration you wish to be assessed?

For more information please visit: **www.greenlinkinterconnector.eu**

BIODIVERSITY

Greenlink
INTERCONNECTOR

Surveys will be carried out and the data assessed to ensure that the final onshore elements of the proposal are designed sympathetically to the local environment and wildlife and where possible enhancement measures will be employed.

Studies will cover the landfall site and the various cable routes under consideration and the possible converter station locations.

Studies commenced in 2018 include:

- Extended Phase 1 Habitat Survey
- Breeding Bird Surveys

As well as birds, wildlife to be considered by these assessments also include badgers, bats, otters, water voles, reptiles, great crested newts and dormice.

Consideration is also being given to local vegetation, including hedgerows, trees and important habitats.

The surveys will be used to avoid, reduce and offset any impacts on biodiversity through sensitive design and mitigation measures as required.

Your views

Do you know of any local environmental groups that Greenlink should consult? Are there specific issues you feel should be assessed that aren't currently being assessed?






For more information please visit: **www.greenlinkinterconnector.eu**

HISTORIC ENVIRONMENT

Greenlink
INTERCONNECTOR

The potential effects of Greenlink on local archaeology and cultural heritage will be assessed by seeking to identify, predict and evaluate the significance of potential effects on designated and non-designated heritage assets within a study area of 1.5 km from the possible converter station locations and within a 200m study area from the cable route corridor.

Cultural heritage encompasses valued features and remains, including buildings, monuments and archaeological remains. It can also include landscapes shaped by human occupation and design, such as historic parks and gardens.

The importance of cultural heritage is recognised in legislation and planning policy.

The converter station locations under review are located within the Milford Haven Waterway Historic Landscape Area but are also located in such a way as to complement the existing industrial surrounds.

A number of archaeological interest features are present in the vicinity of the landfall site at Freshwater West, including a weapons pit and gun emplacement adjacent to the Grade II Listed War Memorial on the far side of the highway from the landfall site and the Devil's Quoit Burial Chamber Scheduled Monument located within c.100m of the proposed cable alignment from the landfall site.

Given the large number of sites relating to prehistoric activity in this region, there is also a potential for the development to uncover as yet unknown archaeological remains, especially in terms of prehistoric flint scatters.

Impacts and mitigation

During construction the potential impact of the onshore cables, landfall site and the converter station could be the loss or interference with a site or feature of archaeological, architectural and cultural heritage significance caused by excavations or by construction related vibrations.

The importance of cultural heritage is recognised in legislation and planning policy

Greenlink will consider the predicted impacts of the proposed scheme and will aim to avoid adverse effects on archaeology and heritage assets within the study area. Wherever possible, mitigation will be designed to deliver benefits, such as enhancing the visual setting of historic assets.

***Greenlink will aim to avoid undisturbed archaeological remains and preserve them in situ.** Where this is not possible, preservation by record will be proposed as mitigation.*

For more information please visit: **www.greenlinkinterconnector.eu**

TRAFFIC & TRANSPORT

Greenlink
INTERCONNECTOR

The traffic impact assessment will address the traffic impacts on the road network from the construction and operation of the Greenlink project. The assessment will include the supply of materials, plant and equipment, the cable laying operations and the various components of the converter station. Traffic arising from the construction and operations workforce will also be addressed.

A Transport Assessment (TA) or Transport Statement (TS) will be produced in accordance with best practice.

The methodology for the TA or TS will be agreed with Pembrokeshire County Council. It will include a review of the existing traffic patterns and an estimation of the traffic volumes which will be generated by the construction of the onshore cable, the landfall site and the converter station. The traffic generated by the construction workforce and by the transport of materials and equipment will also be predicted.

The potential disruption to the road network during the installation of the cables and the availability of alternative routes will be assessed. The traffic distribution pattern on the local road network during construction will be examined and impacts determined.

We will work hard to limit the impact of traffic and transport on local residents and businesses as much as possible and recommendations will be made to mitigate any potential traffic impacts on the road network.

Potential impacts and mitigation

There is potential for traffic impact from Greenlink during the construction phase which will temporarily give rise to additional traffic on the road network.

Installation of the cables may require partial or full road closures and traffic may have to use alternative routes. Where the cable route diverges from the road, the impacts will be reduced.

Once the Greenlink project is in operation, the potential for a traffic impact is minimal. The level of operations and maintenance workforce will be low, so that the impact on any particular road will be insignificant.

Traffic Management Plan (TMP)

As part of the planning application process a Traffic Management Plan (TMP) will be put together that will outline measures for managing and mitigating the construction traffic caused by Greenlink.

Greenlink will consult the local community on a draft TMP to ensure that all considerations of local amenity have been incorporated and that members of the local communities are satisfied with the mitigation measures being proposed.

Your views

Do you have any specific concerns? Are there local organisations (businesses, schools etc) that we need to involve in the Traffic Management Plan?

For more information please visit: **www.greenlinkinterconnector.eu**

AGRICULTURAL LAND

Greenlink
INTERCONNECTOR

This assessment considers the impact of the scheme on agricultural land.

Much of the landfall and initial cable corridor is Grade 3b land (moderate quality agricultural land).

The eastern sectors of the cable corridor and the proposed converter station locations are predominantly Grade 2 (best and most versatile agricultural land), interspersed with Grade 3b (moderate quality agricultural land) and non-agricultural land.

Impacts

Construction of the converter station will result in the permanent loss of land from agricultural use. Land disturbed during the construction of the landfall and cable will be reinstated and therefore there will be no permanent loss of agricultural land associated with the landfall or cable route.

Cable heat

The impact of heat generated by the cables on the above-ground crops is not considered sufficient to cause 'sterile strips'. The underground cables which will be used in Wales are designed to have a low resistance, and hence low losses to prevent the cable heating up under normal operating conditions. During events when there is a fault or an outage, there is potential for heat to be generated, however the heat would not be sufficient in scale or in duration to cause sterile strips.

Mitigation

Apart from the converter station, the majority of land take for the project (access tracks, compound sites, cable installations corridor etc) will be temporary, with land excluded from agricultural use for the duration of construction operations only. Temporary land take areas will be reinstated to agricultural use.

Mitigation is likely to include, but will not be limited to, the avoidance of development in arable land (including mixed use and silage fields) in preference of permanent pasture, where practicable; and the informed and sensitive positioning of temporary land take within fields (considerate micro-siting).

Where possible, access tracks and compound sites will be located to the edges of fields, in field boundaries, or less productive areas of individual fields, ensuring that the maximum area of productive land remains in agricultural use.

Consideration of farm activities to minimise disruption to local landholdings and farming businesses will also be a key factor during construction.

Your views

Do you have any concerns or observations that should be addressed by Greenlink?

ELECTROMAGNETIC FIELDS

Greenlink
INTERCONNECTOR

Electric and Magnetic Fields (EMFs) are produced both naturally (Earth has both an electric and a magnetic field) and by humans – wherever electricity is used, both in the home and from the equipment that makes up the UK electricity system.

For example, there are background EMFs present in all houses that come from the house wiring, electrical appliances, and the distribution cables that carry electricity along streets.

Electric fields depend on the operating voltage of the equipment. The operating voltage of transmission equipment is generally constant and so the electric field produced is also nearly constant. Magnetic fields, on the other hand, depend on the electrical currents flowing, which vary according to the electrical power requirement at any given time.

In order to protect members of the public, in locations where people spend significant time, the Council of the European Union passed Recommendation 1999/519/EC on limiting public exposure to electromagnetic fields.

The policy of both National Grid (UK) and ESB (Ireland) is to design and operate their equipment in compliance with the EU recommendation and subsequent legislation.

There are a number of existing sources of EMF in the vicinity of the Greenlink study area.

These include:

- The local electricity distribution system
- Wiring and appliances in nearby homes and other buildings
- Pembroke Substation
- Overhead transmission lines

The Greenlink electrical infrastructure (converter station and underground cables) will be designed to comply with the EC Directive relating to Occupational Exposure to Public Health and the EU 1999 recommendation on Public Exposure.

A National Grid booklet on EMFs is available at this public consultation.

SOCIO-ECONOMICS

Greenlink
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This study will provide an overview of the socio-economic conditions in the area of the proposed development and an assessment of potential effects to the population and human health derived from the implementation of the project. This will encompass consideration of population and demographic data, employment data and the volume and value of tourism to the local economy.

Local tourism

The Wales Coast Path, incorporating the Pembrokeshire Coast Path, runs along the cliff top within the Pembrokeshire Coast National Park. The cable route does not cross the Wales Coast Path; however, the Wales Coast Path will need to be considered in relation to the proposed converter station.

Freshwater West is a popular beach with water sports enthusiasts, local fishermen and nearby tourist facilities.

Several undesignated footpaths are also within the study area. Further consultation with the Local Planning Authority should clarify the status of paths and any constraints during construction.

Potential impacts

Temporary impacts may be incurred on the Wales Coast Path; similarly, temporary disruption may be felt depending on the requirement to install cables within the highway.

Direct and indirect employment will be created for both the construction and operational phase.

The construction of the cables and converter station have the potential to have a negative impact on residential amenity in the immediate vicinity of the construction activities. Once the cables and converter station are operational, the potential for negative impact on residential amenity is minimal.

Your views

Please let us know of any local tourism business or group we need to consider and involve in project discussions.

Are there any particular local events that attract tourists that Greenlink needs to be aware of?

Jobs

Jobs and knock-on economic benefits during construction

For more information please visit: **www.greenlinkinterconnector.eu**

AIR QUALITY

Greenlink
INTERCONNECTOR

This assessment considers the potential impacts on air quality during construction, including dust emissions, on-site machinery and construction traffic travelling to and from the site. The potential impacts on air quality during the operational phase will also be addressed.

The construction phase of Greenlink has the potential to generate dust emissions, which could give rise to nuisance for local residents. Construction plant and equipment, and the traffic generated by the construction process, have the potential to give temporary rise to emissions of oxides of nitrogen and particulate matter, which could impact on local air quality.

Following the assessment of air quality effects during the construction phase, mitigation measures will be recommended to minimise the impact from dust. These measures, including dust suppressant measures, will be considered for both human and ecological receptors.

The operational phase of Greenlink is not expected to adversely affect local air quality as no new sources of emission to air will be introduced and additional road traffic associated with maintenance of the converter station is anticipated to be minimal.

Consideration of the impact of the Greenlink project on the climate (e.g. greenhouse gas emissions) and its vulnerability to climate change is also factored in.

For more information please visit: **www.greenlinkinterconnector.eu**

MARINE SURVEYS

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The proposed marine cable will run from Freshwater West, Pembrokeshire, Wales to the Hook Head Peninsula in County Wexford, Ireland. There are 3 possible routes being considered as the cable approaches Freshwater West. All three routes are being assessed for technical viability and potential environmental impacts.

Technical viability

Marine surveys are taking place in the summer of 2018 and will include geophysical and geotechnical surveys.

Geophysical

The geophysical survey will look to map the seabed and sub-surface geology along the proposed route in order to be able to optimise cable routing within the survey corridor and to enable assessment of cable target burial depth along the route.

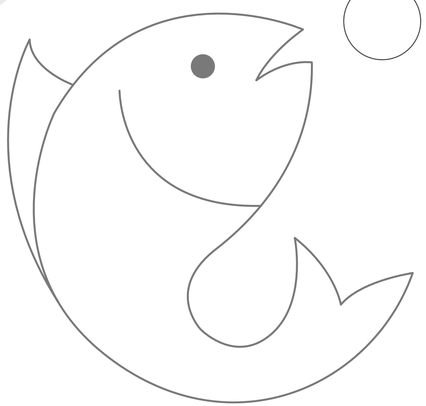
It will also look to provide the geophysical data from which a marine archaeological assessment can be undertaken as part of the consenting process.

Geotechnical

The purpose of the geotechnical survey is to evaluate the nature and mechanical properties of the seabed and intertidal sediments along the survey corridor. This will be done using a number of techniques, including drilling boreholes and digging trial pits.

Environmental impacts

The initial marine survey aims to map the distribution and extent of marine habitats within the proposed cable corridor. Data from this survey will then be used to inform the environmental assessment.



For more information please visit: **www.greenlinkinterconnector.eu**

MARINE ENVIRONMENTAL ASSESSMENTS

Greenlink
INTERCONNECTOR

The aims of the environmental assessment will be to identify potential impacts, including:

- Penetration and/or disturbance of the substrate below the surface of the seabed
- Visual disturbance
- Underwater noise changes
- Siltation rate changes
- Hydrological changes
- Physical loss (permanent change)
- Electromagnetic changes
- Possible in-combination effects

Mitigation

Once potential impacts have been established, mitigation measures will be proposed to ensure that impacts are minimised or removed.

Topics covered by the environmental assessment will include:

- Protected sites
- Benthic ecology
- Fish and shellfish
- Marine birds
- Marine mammals and reptiles
- Marine archaeology and UXOs
- Coastal processes
- Fisheries
- Shipping and navigation
- Recreation
- Cumulative effects

Your views

Greenlink has appointed a Fisheries Liaison officer to liaise with local fishing interests. Do you want our Fisheries Liaison officer to contact you?






For more information please visit: **www.greenlinkinterconnector.eu**

PROJECT TIMELINE

Greenlink
INTERCONNECTOR

A large infrastructure project such as the Greenlink interconnector takes several years from development to construction, including technical design, obtaining the relevant permits and consultation with a variety of stakeholders.

Technical and environmental constraints have to be identified and fully assessed to ensure that they are considered within the final design of an infrastructure project. Detailed environmental and technical assessment surveys commenced in 2018. This follows the completion of desk-based assessments and consultation with statutory consultees.

Once a detailed proposal and design have been put together, permits and licences will need to be obtained from: Pembrokeshire County Council, Natural Resources Wales (NRW) and Milford Haven Port Authority, in Wales; and An Bord Pleanála and the Department of Housing, Planning and Local Government – Foreshore Unit and the Commission for the Regulation of Utilities, in Ireland.

Once the appropriate permits and licences have been obtained, the scheme will need to be constructed, which could take around 36 months from start to finish.

The project is envisaged to commence on-site construction in 2020 and be fully operational in 2023

2018

Environmental Studies

Detailed environmental and technical studies commence.

2019

Planning applications to be submitted

The application for the onshore components will be submitted to Pembrokeshire County Council (Wales) and An Bord Pleanála (Ireland), the application for the marine components will be submitted to Natural Resources Wales (Wales) and the Department of Housing, Planning and Local Government – Foreshore Unit (Ireland)

2020

Commence construction

The project is envisaged to commence on-site construction

2023

Interconnector operational

Expected to be fully operational

For more information please visit: **www.greenlinkinterconnector.eu**

THE PLANNING PROCESS (WALES)

Greenlink
INTERCONNECTOR

Following consultation with statutory consultees, Greenlink is of the view that the interconnector does not require the completion of an Environmental Impact Assessment (EIA).

However, Greenlink is committed to carrying out a comprehensive and thorough development process and will therefore be producing a non-statutory Environmental Report with a structure that aligns with the EIA process. This will ensure that all environmental issues are addressed effectively.

Onshore components in Wales

Due to the nature and size of the proposed converter station and associated access arrangements, the planning application will likely constitute a 'major development' as defined by the Town and Country Planning (Development Management Procedure) (Wales) Order 2016. As such, it will undergo a standard planning application schedule, accompanied by an Environmental Report and will include statutory pre-application consultation; including a public consultation element.

The planning application for the converter station is expected to be submitted to Pembrokeshire County Council in March 2019, once all the technical and environmental assessments have been completed and the choice of sites/cable routes and the designs finalised.

In accordance with Schedule 2, Part 17, Class G of the Town and Country Planning (General Permitted Development) Order 1995 (as amended) (GPDO) the landfall site and underground HVDC cabling constitute 'permitted development' and as such are not anticipated to require planning permission. To confirm the planning status of the cable installation, Greenlink will apply for a Certificate of Lawful Development (CoLD). This is expected to take place prior to the converter station planning application.

It is important to note that, despite the 'permitted development' status of the cabling and landfall, Greenlink is committed to completing a detailed environmental assessment of the cable route and landfall to ensure that the design and installation fully considers the local environment.

Marine components in Wales

Subsea surveys are scheduled to be undertaken during the summer of 2018. The results of these surveys will be used to finalise the subsea cable route and be incorporated into a Marine Licence application submitted to Natural Resources Wales and a Marine Works Licence submitted to Milford Haven Port Authority. Both applications are expected to be submitted in March 2019.

4.7 APPENDIX 7 – ANGLE COMMUNITY COUNCIL PRESENTATION SLIDES 4TH JULY 2018

GREENLINK INTERCONNECTOR

Angle Community Council Meeting
4th July 2018

CONTENTS

PROJECT INTRODUCTION

- **Electricity Interconnector linking Irish and GB electricity transmission networks**
- **Promotes the development of an integrated grid**
- **Security of supply**
- **Better energy price competition**
- **Project of Common Interest status**
- **Interconnector Licence**
- **Cap and Floor**

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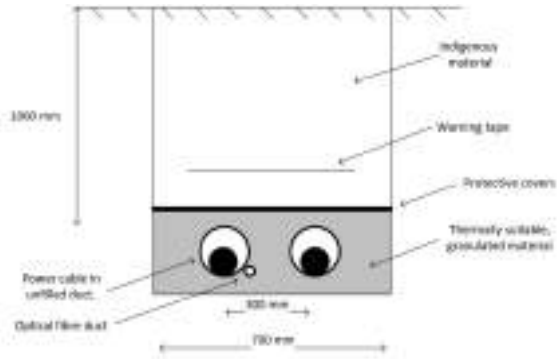
COMPONENTS

- 2 x Converter stations – one near Great Island substation in County Wexford and one near Pembroke substation
- 2 x HVDC cables plus optical fibre cable
  - Circa. 28km onshore in Ireland
  - Circa. 170km marine cable
  - Circa. 7km onshore Wales



Indicative HVDC underground cable arrangement

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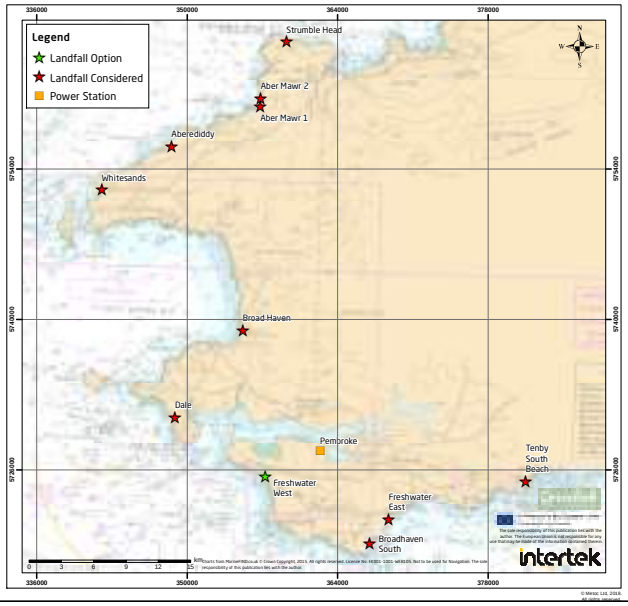
LANDFALL OPTIONS (WALES)



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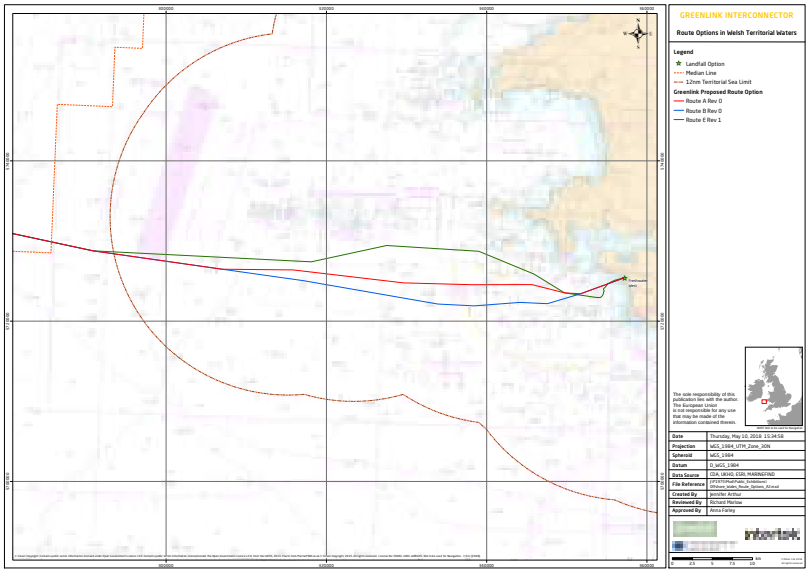
MARINE ROUTES (WALES)



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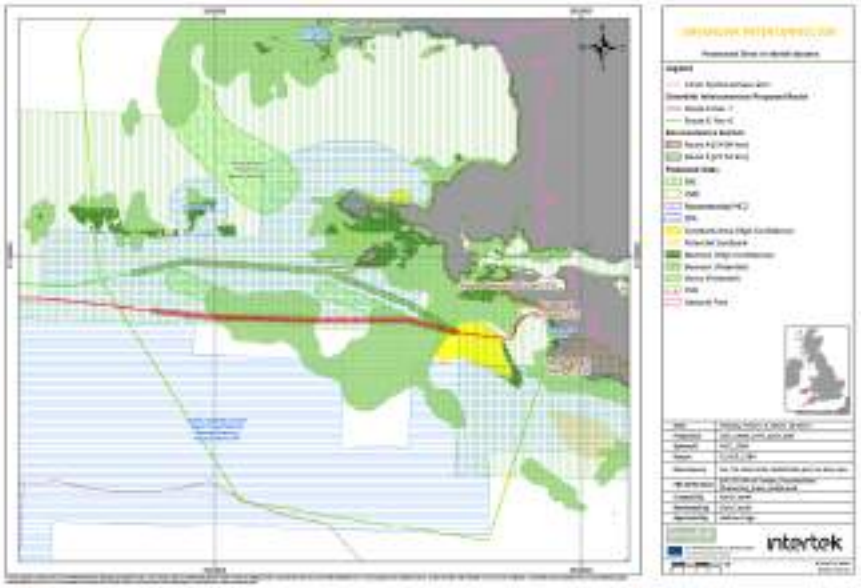
MARINE ENVIRONMENTAL CONSTRAINTS (WALES)



MARINE ROUTE SURVEY

Freshwater West (Wales) to Baginbun Beach (Ireland) 157.9km

- **Geophysical Survey – 500m corridor**
  - **Water depths & bedforms**
  - **Natural and anthropogenic seabed features**
  - **Shallow geology**
  - **Magnetic anomalies**
- **Geotechnical Survey – nominally 1.5km**
  - **Cone Penetrometer Test 3m/6m**
  - **Vibrocore sediment sampling 3m/6m**
  - **Temperature and thermal resistivity measurements (onboard and lab)**
  - **Core testing**
- **Geotechnical Boreholes**
  - **Intertidal**
  - **25m / 10m to inform HDD**
- **Benthic Survey – 5km**
  - **Grab sampling**
  - **Drop down camera**
- **ROV Survey**
  - **Survey of asset crossing location**
- **UXO Survey (Castlemartin Training Area)**
  - **For route feasibility**
  - **100m corridor**

ALTERNATIVE CABLE ROUTES | WALES

ONSHORE STUDIES AND ASSESSMENTS

- **Biodiversity**
- **Historic Environment**
- **Landscape and Visual Impact**
- **Traffic and Transport**
- **Socio Economics**
- **Noise and Vibration**

PLANNING AND PERMITTING (WALES)

- **Onshore**
  - **Lawful Development Certificate –** Pembrokeshire County Council and Pembrokeshire Coast National Park Authority
  - **Major Development Planning Permission** – Pembrokeshire County Council
- **Offshore**
  - **Marine Licence -** Natural Resources Wales
  - **Marine Works Licence -** Milford Haven Port Authority

FUTURE WORK

- **Lawful Development Certificate application**
- **Continue onshore survey work**
- **Geotechnical and geophysical work at the landfall and converter station sites**
- **Subsea surveys**
- **Detailed design work**
- **Supply chain engagement**
- **Further public consultation events**
- **Planning applications**