

Proposals for the NeuConnect Interconnector

Public Information Leaflet

Contact us

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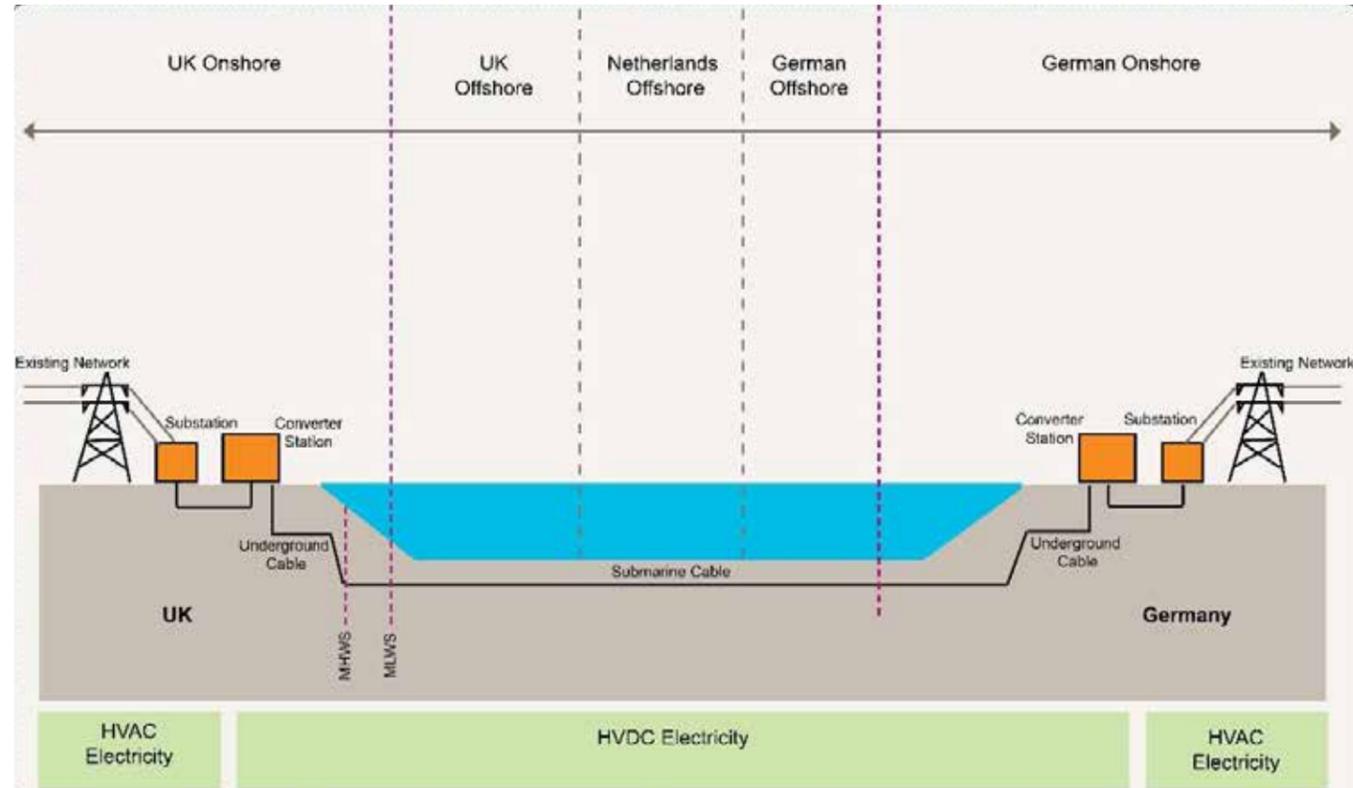
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Introduction

Project Overview

The NeuConnect Interconnector will create the first direct power link between Germany and Great Britain, connecting two of Europe's largest energy markets for the first time.

Around 700km of subsea cables will form an 'invisible highway' allowing up to 1.4GW of electricity to move in either direction, enough to power tens of millions of homes over the life of the project.



Key elements of the NeuConnect Interconnector

Who is developing the NeuConnect Interconnector?

The project will be delivered by NeuConnect Britain Ltd, which holds an electricity interconnector licence.

The project is being developed by an international, experienced consortium that includes Meridiam, Allianz Capital Partners on behalf of Allianz Group and Kansai Electric Power, with the project also supported by Greenage Power and Frontier Power as developers.

The key partners bring a proven track record in delivering large-scale energy infrastructure, creating a team with significant experience and expertise in interconnector projects.



About interconnectors

Interconnectors create important new links between the energy networks of different countries, allowing a safe, secure and affordable supply to cross geographical boundaries.

Why are they needed?

The creation of new power links between countries forms a crucial part of British energy policy due to the significant benefits they deliver to consumers and businesses, including:

- Greater security of supply
- More resilience in energy networks
- Contribution to carbon reduction
- Increased competition will help lead to lower costs for consumers and businesses

Interconnectors also provide an important outlet for the excess power generated by renewable energy infrastructure by allowing this excess power to be rechannelled into markets where there is a demand.



"The Government's priority is to maintain affordable, clean and secure energy supplies for businesses and households. We share the EU's ambition to make energy trading easier and more efficient by opening up national markets, and increasing the level of interconnection between them."

The Rt Hon Claire Perry MP
Minister of State for Energy & Clean Growth (9 May 2018)



Offshore cable installation vessel

Offshore elements

The offshore element of the NeuConnect Interconnector will link the Isle of Grain, in Kent with Fedderwarden, near Wilhelmshaven, in Germany, with subsea cables travelling through UK, Dutch and German waters.

The route of the subsea cables and exact onshore locations in Germany and Great Britain will be determined by project development work that is currently underway.



Proposed offshore cable route, for illustrative purposes

Subsea cable route

The subsea cable route will comprise two high-voltage subsea cables, together with necessary fibre-optic cables of a much smaller diameter.

The two cables will be installed using a cable laying vessel or barge. Where possible, the subsea cables will be buried in trenches under the sea floor. Where trenches cannot be excavated, the subsea cables will be protected using alternative protection systems.

Seabed surveys to establish the exact subsea route for the project began in March this year and over 700km of surveys have now been substantially completed.

Landfall location

The high voltage subsea cables will be brought ashore at a landfall location, proposed to be located on the north coastline of the Isle of Grain. An underground Joint Transition Chamber (JTC) may be constructed at the landfall location to bring the subsea cables ashore and connect them to Direct Current (DC) cables that will run underground from the landfall to the new converter station.

Onshore elements in GB

Onshore cable route

Two HVDC underground cables will connect the subsea cables from the landing point on the Grain coast to a new converter station around 2km inland. No overhead lines will be required as part of the onshore cable route.

An underground data cable will also be required for operational purposes. The underground data cable will be installed alongside the underground cables.

Three potential onshore cable route options will be assessed as part of an optioneering process, which will consider the relative environmental and engineering constraints of each option.

Converter station

Converter stations are required in both Great Britain and Germany to convert electricity from Direct Current (DC) Alternating Current (AC) and vice versa. AC is used in GB and German electricity grids, while DC is used for sending electricity along the high-voltage subsea and underground cables because it is more efficient over large distances.

The converter station site will comprise a mix of buildings and outdoor electrical equipment and will have a maximum height of approximately 26m. The converter station site will be approximately 10 hectares (25 acres), although the actual converter station will only occupy a small portion of the overall site. The design and layout of the converter station will be developed and finalised in due course.



Proposed converter station location and potential onshore cable route options

New electricity substation

It is proposed that a new substation will be constructed adjacent to the new converter station to enable the NeuConnect Interconnector to link into the existing National Grid network.

Mitigation

NeuConnect will consider all possible options to minimise the impact of the onshore elements and, where necessary, will incorporate appropriate mitigation measures into the final design proposals.

Benefits

NeuConnect Interconnector will help power the future with an energy supply that is:



RESILIENT

The first direct link between the GB and German electricity networks will enable a more diverse and sustainable supply, offering much needed resilience, security and flexibility in each market.



ECONOMIC

The new link will significantly increase choice and competition in the GB and German markets. This could help lead to millions of consumers and businesses benefitting from reduced electricity prices.



EFFICIENT

The investment in proven, reliable technology offers GB and German networks greater efficiency and flexibility to deal with the changing demands of industry, businesses and consumers.



TRANSFORMATIVE

The vital new link will carry enough electricity to power tens of millions of homes over the life of the project.

The delivery of the project will also create significant economic benefits and the project will support up to 500 jobs during construction.



SUSTAINABLE

The integration of renewable energy sources will see a reduction of up to 34 million metric tonnes of CO₂ over the life of the project - a significant step forwards in Great Britain and Germany's low-carbon agenda.



DELIVERABLE

NeuConnect is targeting 2023 for project completion, helping meet Great Britain and Germany's future energy needs and delivering significant benefits for consumers, businesses and industry in less than 5 years.

Next steps



The Onshore Planning Process

The installation of underground cables in Great Britain will benefit from permitted development rights, whilst the construction of a new substation and converter station will be subject to planning consent from Medway Council.

Separate applications for the relevant consents will be made to the relevant German and Dutch authorities.

NeuConnect is undertaking pre-application discussions with Medway Council to discuss the project and begin preparing all necessary information for the submission of a planning application.

The Offshore Planning Process

The offshore works required to install the subsea cables within GB waters are subject to obtaining of a Marine Licence from the Marine Management Organisation (MMO) and a river works licence from the Port of London Authority.

Public Consultation

NeuConnect will conduct formal pre-application consultation with the local community in early 2019.

