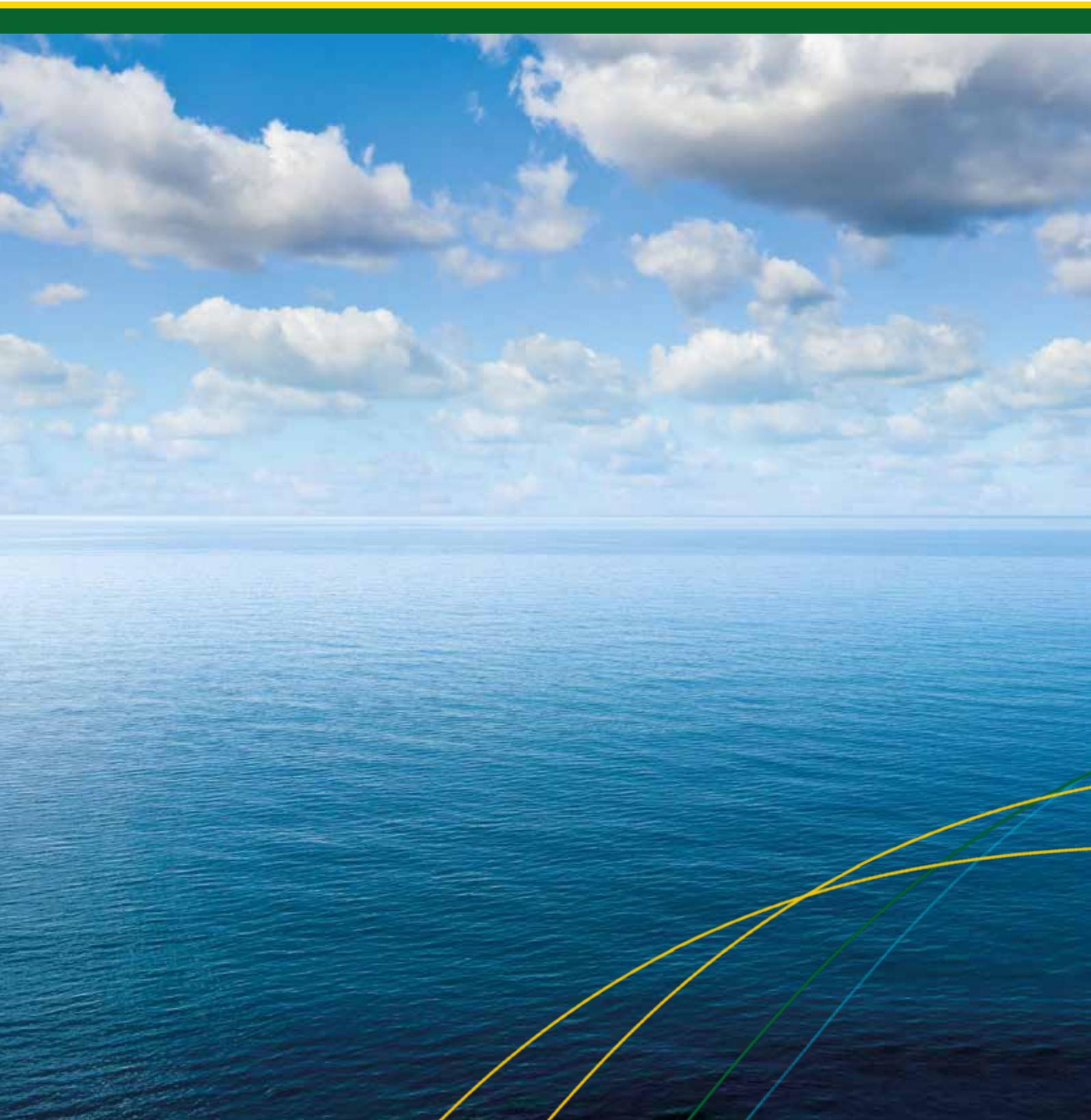




AQUIND INTERCONNECTOR:
A PROJECT OF NATIONAL SIGNIFICANCE
Proposed Scheme Overview





Introduction

AQUIND Limited ('AQUIND') is developing proposals to build a new High Voltage Direct Current ('HVDC') marine and underground electric power transmission link between the south of England and Normandy in France – AQUIND Interconnector.

AQUIND Interconnector will have capacity to transmit approximately 5% of Great Britain's total electricity consumption – enough to keep the lights on in up to 4 million British households.

It will make a significant contribution to improving Great Britain's security of electricity supply and achieving greater affordability by improving competition, making Great Britain's energy market more efficient and enabling greater energy flexibility.

Further, AQUIND Interconnector will help to integrate a greater proportion of non-fossil fuel energy sources and intermittent renewables generation into Great Britain's energy mix.

In July 2018 the Secretary of State for Business, Energy & Industrial Strategy directed that AQUIND Interconnector

should be treated as a Nationally Significant Infrastructure Project ('NSIP'). This means that the construction and operation of AQUIND Interconnector can only be consented by a Development Consent Order ('DCO') made by the Secretary of State under the Planning Act 2008.

AQUIND anticipates the DCO application for the Proposed Scheme will be submitted in 2019 after pre-application consultation has been undertaken and the findings have been fully considered when further developing and refining the proposals. It is estimated that AQUIND Interconnector will become operational in 2022.

This information leaflet provides more information on AQUIND Interconnector and how proposals to develop the Proposed Scheme will progress.



Courtesy and copyright of Prysmian

About Interconnectors

Interconnectors are transmission links which allow the transmission of electricity across borders.

Why are interconnectors needed?

The UK Government and the European Commission have identified that interconnectors are vital for achieving an integrated energy market in which families and firms get the best value for their money.

These links will help achieve the Government's ambition of widening access to international markets, thereby increasing competition and security of supply.

“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)

A Project of Common Interest

In early 2018, AQUIND Interconnector was awarded Project of Common Interest (PCI) status by the European Commission.

PCIs are key European energy infrastructure projects that address the three challenges of the European energy policy: affordability, security of supply and decarbonisation.

For more information on PCIs please visit the European Commission's website.¹



¹ <https://ec.europa.eu/energy/en/topics/infrastructure/projects-common-interest>

Elements of AQUIND Interconnector

AQUIND Interconnector is a proposed High Voltage Direct Current ('HVDC') marine and underground electric power transmission link between the south of England and Normandy in France, with the capacity of 2000 MW (net of transition losses).

It is estimated that AQUIND Interconnector will have sufficient capacity to transmit up to 16,000,000MWh of electricity annually between GB and France, accounting for approximately 5% and 3% of their respective total electricity consumption and enough to keep the lights on in up to 4 million British households.²

AQUIND Interconnector is comprised of three principal elements, being the onshore elements in Great Britain, the marine elements between the UK and French coastlines and the onshore elements in France.

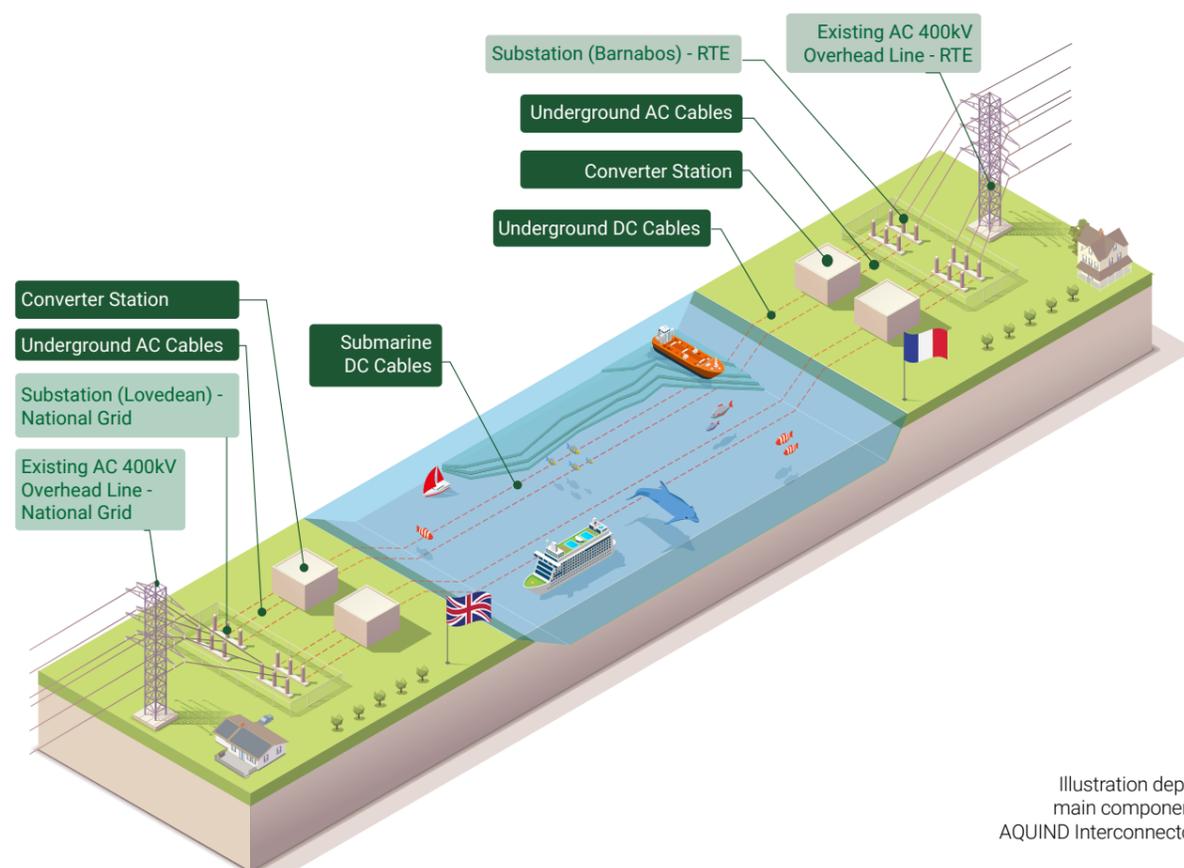


Illustration depicting the main components of the AQUIND Interconnector project

UK onshore elements:

- Works at the existing National Grid Lovedean substation in Hampshire where AQUIND Interconnector will connect to the existing GB grid;
- Underground alternating current ('AC') cables, connecting Lovedean substation to the proposed nearby converter station;
- The construction of a converter station comprising a mix of buildings and outdoor electrical equipment. The building roofline will vary in height but will be approximately 22 m at its peak, and may also include lightning masts;
- Two pairs of direct current ('DC') cables with one fibre optic cable of smaller diameter per pair of cables for data transmission from the proposed landfall site in Eastney (near Portsmouth) to the converter station at Lovedean. The cables will be approximately 20 km in length and the intention is to locate the cables within existing highway or road verges where practicable.

French onshore elements:

- Works to an existing substation at Barnabos, to be carried out by Reseau de Transport d'Electricite ('RTE');
- AC cable planning, installation and connection, undertaken by RTE;
- The construction of a converter station near Barnabos, which will be similar in nature to the UK equivalent;
- Two pairs of underground high voltage direct current cables together with smaller diameter fibre optic cables for data transmission (one for each pair of electric cables) from the landfall on the French shore to the newly built converter station near Barnabos substation, approximately 35 km in length. It is proposed that the landfall site in France will be near Dieppe or Pourville-sur-Mer, with the exact location to be confirmed subject to further environmental and technical assessments.

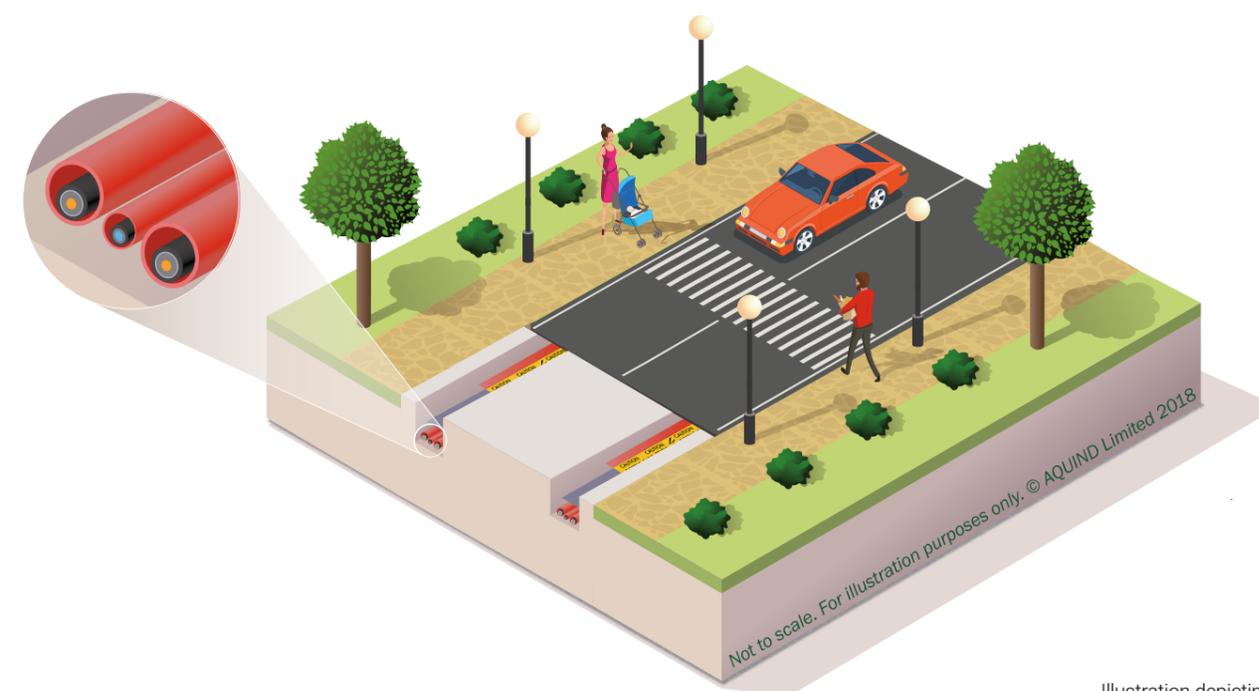


Illustration depicting the HVDC underground cables

² BEIS, Energy Consumption in the UK (ECUK) (2018): https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/729326/ECUK_Tables_2018.xlsx



Marine elements:

- Four marine cables between England and France, which can be bundled in pairs, and a smaller diameter fibre optic cable per pair of marine cables for data transmission. The marine cable route can be divided into the following sections:
 - Approximately 47 km within the UK territorial limit, i.e. 12 nautical miles from the mean high water mark;
 - Approximately 53 km from the UK territorial limit to the boundary of the Exclusive Economic Zone ('EEZ');
 - Approximately 58 km from the boundary of the EEZ to the French territorial limit;
 - Approximately 29 km within the French territorial limit, i.e. 12 nautical miles from the mean high water mark.

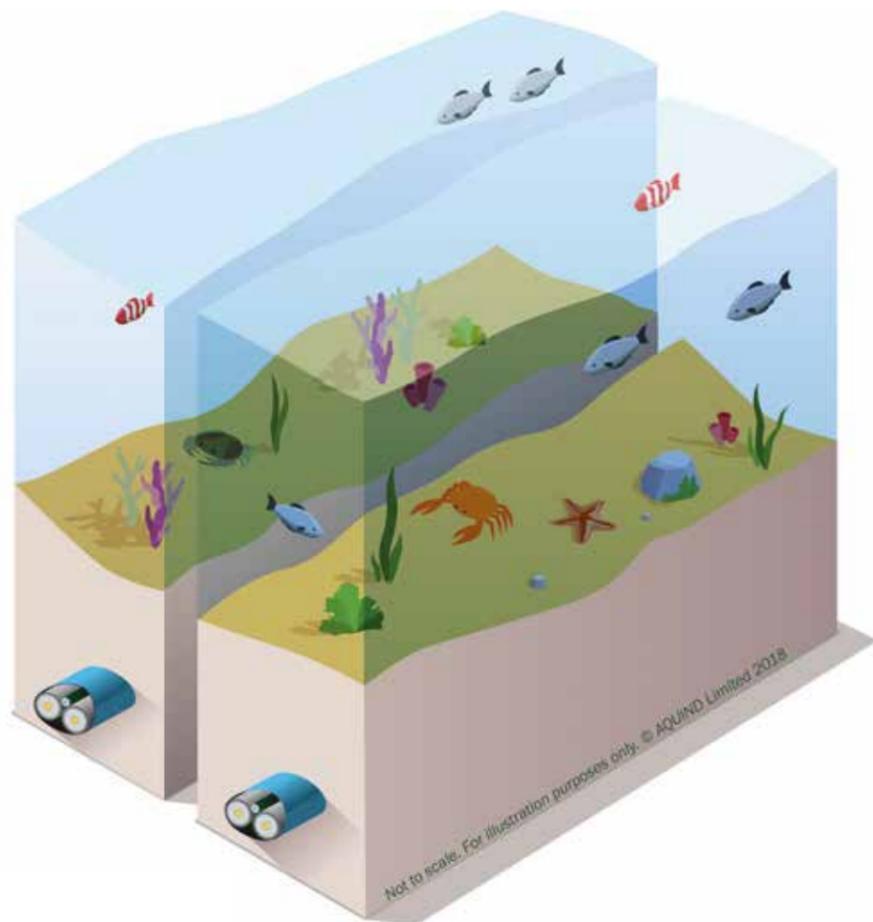


Illustration depicting the HVDC marine cables

Benefits of AQUIND Interconnector



A reliable electricity supply

AQUIND Interconnector will have a capacity of 2000 MW and it is estimated will transmit up to 16,000,000 MWh of electricity between Great Britain and France, accounting for approximately 5% of Great Britain's total electricity consumption.³

AQUIND Interconnector will make a significant contribution to improving Great Britain's security of electricity supply and achieving greater affordability by improving competition, making the GB energy market more efficient and enabling greater energy flexibility.



Promoting energy market competition

Structural difference between the Great British and French wholesale electricity prices means that power through the AQUIND Interconnector is projected to predominately flow from the lower priced French market to Great Britain. This results in strong welfare gains for Great British consumers who benefit from a lower electricity price as comparatively cheaper French power flows to Great Britain.



Tapping into cleaner sources of energy

AQUIND Interconnector will help to integrate a greater proportion of non-fossil fuel energy sources and intermittent renewables generation into the Great British energy mix. It is also expected that electricity imported from France will have much lower CO₂ intensity.⁴ This will reduce reliance on fossil fuel power generation plants and in turn reduce Great Britain's CO₂ emissions from the burning of such fuels.



No overhead lines

AQUIND Interconnector will use well-tested and reliable cable technology. Burying the cable along the whole route avoids the need for the construction of overhead lines and their associated visual impact.



Investment in Energy Infrastructure

AQUIND Interconnector represents a significant investment in the UK's energy infrastructure and is being developed without government subsidies.

³ BEIS, Digest of United Kingdom Energy Statistics (2018), p.136: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/736148/DUKES_2018.pdf

⁴ RTE France: <https://www.rte-france.com/fr/eco2mix/eco2mix-co2>, BEIS, Updated Energy and Emissions Projections 2017 (2018), p.36: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/671187/Updated_energy_and_emissions_projections_2017.pdf

Impacts and mitigation

Due to the environmental sensitivities within and surrounding the Proposed Scheme AQUIND has decided to voluntarily undertake an Environmental Impact Assessment ('EIA') and to submit an Environmental Statement ('ES') and a Non-Technical Summary ('NTS') in support of its application for a DCO to set out the findings of the EIA.

The purpose of the EIA is to identify any likely significant environmental effects which may be caused by the Proposed Scheme and appropriate measures to mitigate those effects. The results of the EIA will be set out in the ES.

The ES to be submitted with the DCO application will be informed by a Scoping Opinion from the Planning Inspectorate (PINS). The Scoping Opinions already received from the Local Planning Authorities and Marine Management Organisation (April – June 2018) will ensure that a refined Scoping Report takes into account responses from consultees to date, including the informal consultation in January 2018.

Preliminary Environmental Information regarding the likely environmental effects of the Proposed Scheme will be presented in a Preliminary Environmental Information Report ('PEIR') and Non-Technical Summary as part of the consultation materials, and the local community's views on the information contained within the PEIR will be sought.

At the formal consultation, AQUIND will present the preferred approach, including information on the onshore and marine

elements of their proposals such as the landing point location, underground cable routeing, converter station location and design parameters, together with our proposed mitigation strategies.

During the formal consultation process, AQUIND would welcome comment on any aspects of the scheme of interest to consultees and, in particular:

Converter station:

- Landscaping and screening
- General site mitigation
- Construction and traffic management
- Noise attenuation
- Lighting

Cable route:

- Construction and traffic management

Marine:

- Impacts on fishing and shipping areas within the proposed marine cable corridor that might impact local marine users

The planning process

What are Nationally Significant Infrastructure Projects?

Nationally Significant Infrastructure Projects ('NSIPs') are large scale developments in the fields of energy, transport, water, or waste which require a type of consent known as a "Development Consent Order".

How does the planning process for NSIPs work?

The Planning Act 2008 requires developers of NSIPs to apply to the Secretary of State via the Planning Inspectorate for a Development Consent Order ('DCO').

The Planning Inspectorate, acting as the examining authority on behalf of the Secretary of State, will examine the application for a DCO and will seek the public's views on it. The Planning Inspectorate will then submit its recommendation on the application to the Secretary of State, who will make the final decision. The Secretary of State will make their decision in accordance with applicable national policy, taking into account the local impact of the proposals.

More information about the DCO process can be found on the Planning Inspectorate's website.⁵

When will AQUIND submit its DCO?

AQUIND anticipates the DCO application for the Proposed Scheme will be submitted in 2019 after pre-application consultation has been undertaken, and that consultation has been fully considered when further developing and refining the proposals.

Public consultation

AQUIND wants to ensure that the local community and stakeholders have the opportunity to fully understand and comment on our proposal, along with the proposed mitigation.

Informal consultation

AQUIND undertook informal consultation on its emerging proposals in January 2018. This included three consultation events in Milton, Waterlooville and Lovedean to which more than 10,000 local households and businesses were invited to attend.

The feedback from these events revealed good-levels of local support for AQUIND's proposals.

AQUIND is committed to listening and responding to the feedback received and this has informed the evolution of the proposals and the scope of the technical assessments.

Feedback summary

	86% found the consultation helpful or somewhat helpful
	75% strongly agree or agree with the approach to the cable route design
	68% strongly agree or agree with the aims of AQUIND Interconnector
	61% strongly agree or agree with the approach to the converter station design
	55% strongly agree or agree with the approach to the landing point selection

"This proposal, which will assist in giving flexibility and certainty of energy available, has to be strongly supported"

Resident of Lovedean

"Great idea, we must move forwards to survive - some disruption must take place with any further development - but once finished, no-one will remember what's been done"

Resident of Waterlooville

Formal consultation

Consultation is an important part of the NSIP process. NSIP developers are required to publicise their proposals widely and consult with the local community, local authorities, statutory bodies and persons with an interest in land potentially affected by the proposed development.

Before accepting the application for examination on behalf of the Secretary of State, PINS must be satisfied that adequate pre-application consultation has been conducted.

Later this year, AQUIND will publish a Statement of Community Consultation ("SoCC") setting out how it proposes to consult with the local community on its DCO application.

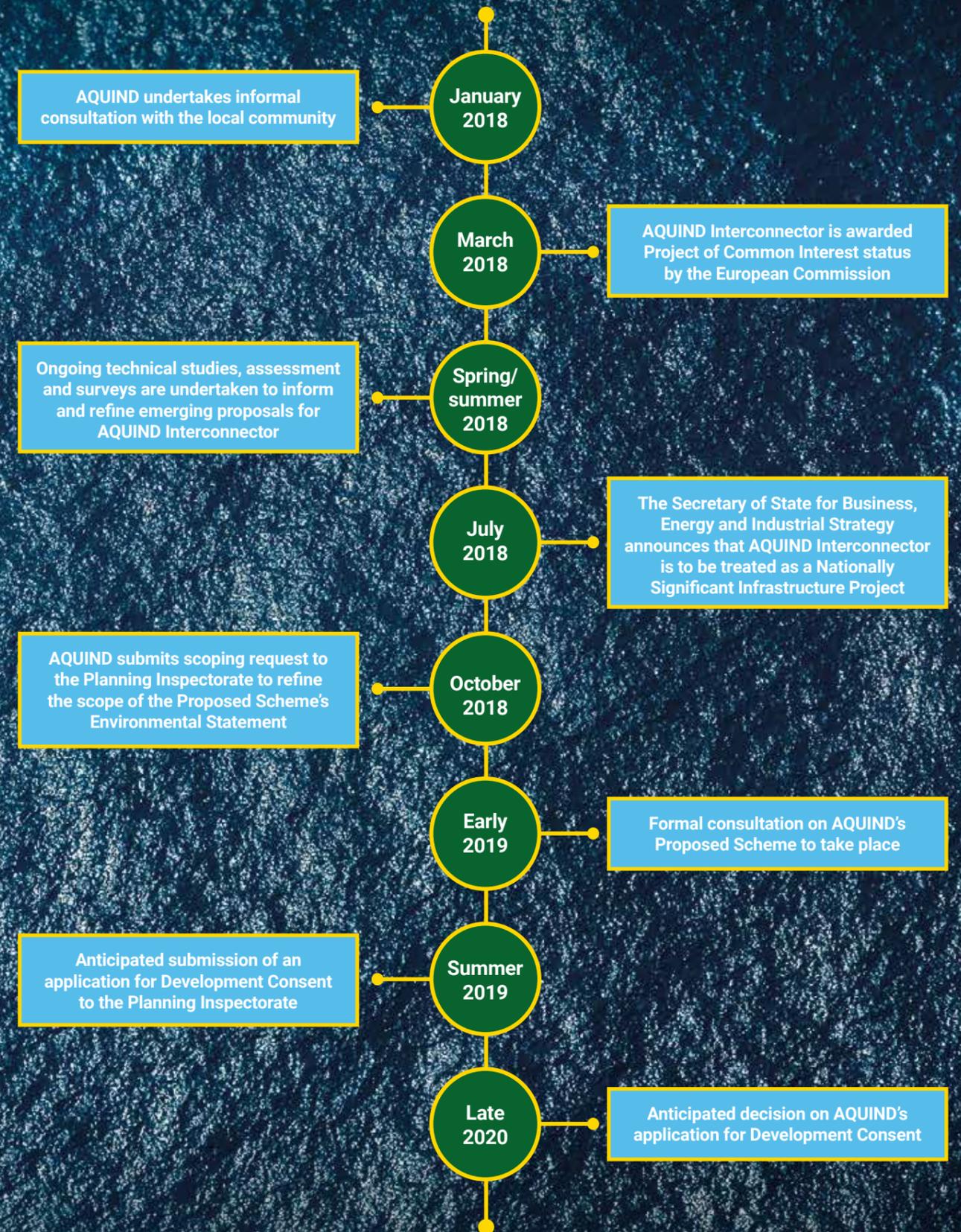
Public consultation will then be carried out in accordance with the SoCC.

AQUIND anticipates public consultation taking place in early 2019.

All comments submitted during the consultation will be recorded and carefully considered by AQUIND and will be taken into account when further developing the proposal.

An explanation of how the comments received have been taken into account will be detailed in the Consultation Report to accompany the DCO application.

Key project milestones





Contact us

If you have any questions, would like further information AQUIND Interconnector you can contact the AQUIND Community Engagement Team via:

Website: www.aquindconsultation.co.uk

Email: aquindconsultation@becg.com

Freephone: **01962 893 869**

Freepost: **AQUIND CONSULTATION**

The Manual of Procedures for TEN-E Projects is available at:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/311184/uk_manual_procedures_ten_e_regulation.pdf

The EU Transparency Platform website is available at:
<http://ec.europa.eu/energy/en/topics/infrastructure/projects-common-interest>