

Connection Point (Existing)

The interconnector will connect into an existing substation on the national transmission grid.

What does the Celtic Interconnector consist of?

The Celtic Interconnector will enable the transfer of electricity between Ireland and France. A fibre optic cable will also be installed, facilitating enhanced telecommunications capacity with continental Europe. The main elements of the proposed infrastructure in Ireland are illustrated in this graphic and described in further detail below.

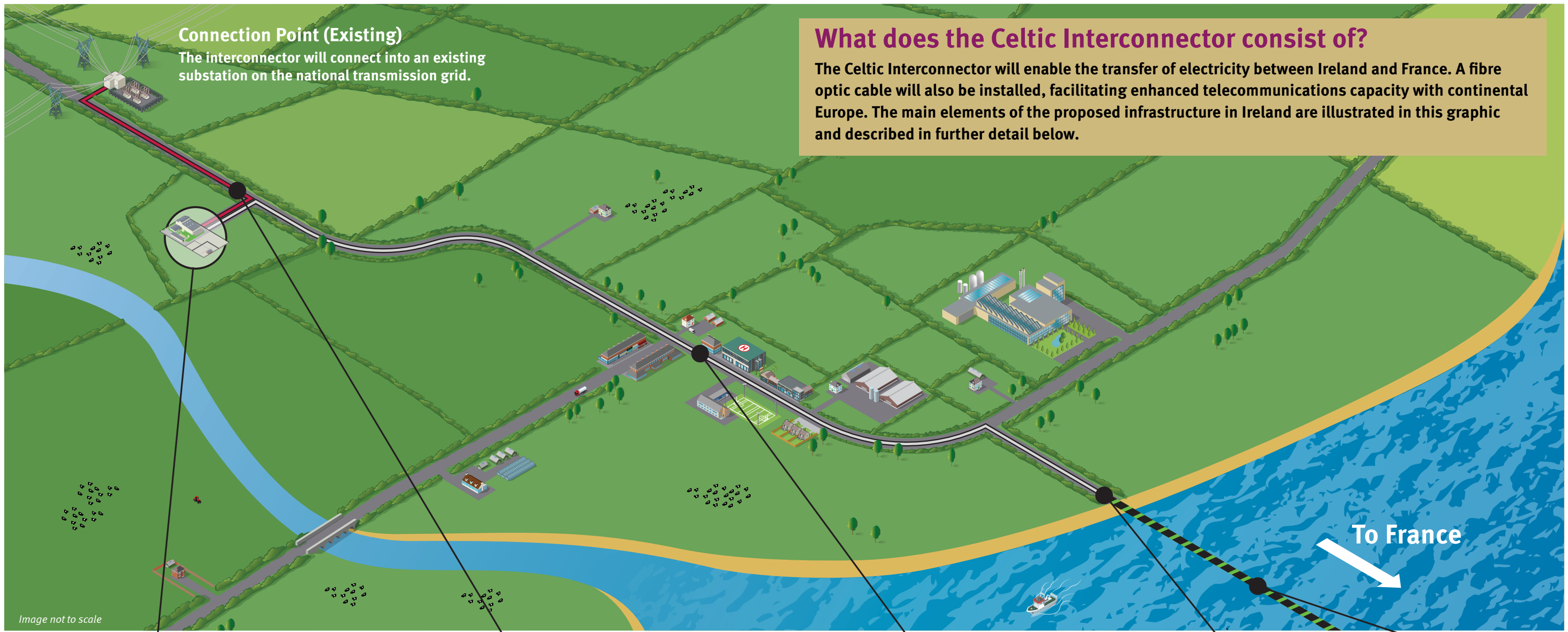


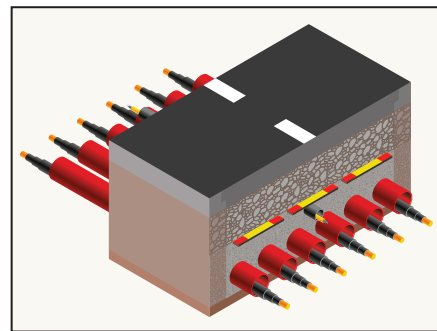
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Converter Station



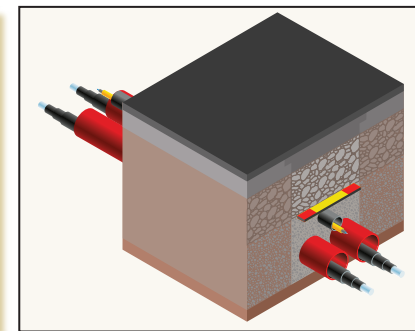
The interconnector will use High Voltage Direct Current (DC) technology, the global standard for the transfer of electricity over long distances using subsea cables. The electricity systems in Ireland and France both use Alternating Current (AC) technology, so converter stations are required at either end. The converter station is an industrial type building and outdoor compound with typical dimensions of 300 m x 150 m and a height of up to 25 m.

AC Land Circuit



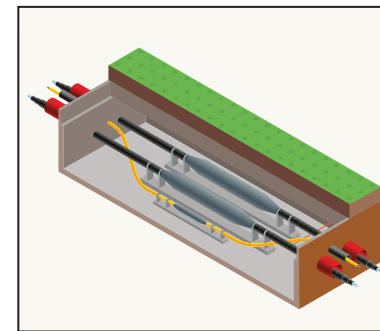
The circuit between the connection point and the converter station is intended to be installed as an underground cable. This appears to be feasible based on assessments to date, however it has been determined that a single cable per phase would not meet the power transfer capacity required. Therefore two cables per AC phase would be required totalling 6 power cables. The cables would be installed in ducts under the road network where possible, which would be fully re-instated. Additional equipment would also be required at both the connection point and the converter station once the cable route goes beyond approximately 4.5km in distance.

DC Land Circuit



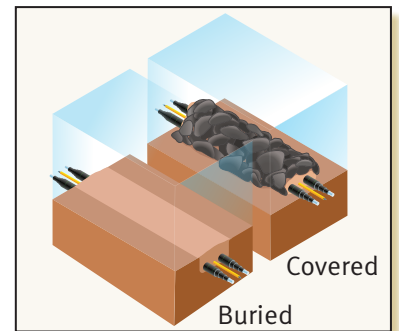
The circuit between the converter station and the landfall point will be by underground cable installed in ducts under the road network, which will be fully re-instated. The total length of this circuit is expected to be between 30 – 40 km.

Landfall Point



This is where the land circuit will connect to the submarine circuit by way of an underground transition joint. This will be installed behind the beach where the submarine circuit comes ashore. The landfall point will be fully re-instated following completion of the works.

Submarine Circuit



The submarine circuit between Ireland and France will be approximately 500 km. It will be either buried beneath the seabed or laid on the seabed and covered for protection.