

Western Link 2

Marine Summary Document

October 2025

Western Link Introduction

Western Link 2 (WL2) is a proposed high-voltage direct current (HVDC) subsea transmission project connecting Ayrshire, Scotland to Wales. Developed by SP Energy Networks in partnership with National Grid Electricity Transmission, WL2 will enable the transfer of around 2 gigawatts (GW) of renewable electricity at 525 kilovolts (kV), supporting Scotland's net zero targets and relieving constraints on the UK's transmission network.

SP Energy Networks has several statutory duties and licence obligations which underpin the approach to the development of new electricity transmission infrastructure with the objective of ensuring that it is technically feasible, economically viable and on balance, causes the least disturbance to both environment and the people who live, work and enjoy recreation within it.

This document summarises the Scottish elements of the marine corridor preliminary routeing and siting study undertaken to identify routes for the marine cable and landfalls which connect the onshore and offshore infrastructure.

Marine Infrastructure Overview

SP Energy Networks is responsible for the WL2 marine cable sections within Scottish waters. Those marine components include:

- A landfall near Monkton, connecting to onshore infrastructure via trenchless installation
- A 30 km marine cable from Monkton, Ayrshire to a switching station near Girvan
- A landfall near Girvan, connecting to onshore infrastructure via trenchless installation
- A long-distance marine cable route from the coast near Girvan to Wales, and
- Integration with the Machair Offshore Wind Farm, located north-west of Islay.

Marine Corridor Preliminary Routeing and Siting Study

SP Energy Networks and National Grid Electricity Transmission commissioned RSK to undertake a marine route corridor preliminary routeing and siting study to support the identification of suitable marine route corridor options. Key environmental, socio-economic and technical constraints have been identified and assessed for each of the alternative options. Preferred options for the different Scottish elements are set out in this summary document.

The marine route corridor preliminary routeing and siting study sits alongside the terrestrial routeing and siting appraisals to identify the preferred end to end solution for the project.

This summary document sets out the landfall and route selection for those elements in Scottish waters only to support the non-statutory consultation underway in Scotland.

Landfall and Nearshore Route Selection

Two landfall options were assessed: Barassie and Monkton. Barassie was constrained by access limitations, proximity to the railway, and nearby conservation designations. Monkton, while close to existing infrastructure, was considered suitable for trenchless installation methods such as Horizontal Directional Drilling (HDD) and presented fewer environmental and technical constraints. Monkton was therefore selected as the preferred landfall.

Four nearshore cable route options between the landfall and switching station were considered:

- Barassie to Girvan (39.04 km)
- Monkton to Girvan (42.04 km)
- Barassie to Ballantrae (62.03 km)
- Monkton to Ballantrae (59.53 km)

Routes were discounted due to installation complexity and increased interaction with sensitive habitats and infrastructure. The **Monkton to Girvan** route was selected based on its:

- Avoidance of known **Annex I habitats**, including *sandbanks slightly covered by seawater all the time* (1110), *reefs* (1170), and *submarine structures made by leaking gases* (1180).
- Reduced proximity to designated sites such as **Luce Bay and Sands Special Area of Conservation (SAC)** and the **Clyde Sea Sill Marine Protected Area (MPA)**. While the route passes through the Clyde Sea Sill MPA, its alignment was selected to minimise interaction with the site's protected oceanographic features.
- More favourable seabed conditions for cable installation and burial.
- Lower potential for environmental and community disruption as the route lies further from residential areas, intersects less with existing land uses, and supports trenchless installation at the landfall.

Offshore Cable Routeing to Wales

The offshore cable route from Girvan to Wales was developed through detailed marine surveys, environmental constraints mapping, and technical feasibility assessments. Three strategic corridor options were considered:

- Option A (Northern Corridor): This route passed close to Beaufort's Dyke, a former munitions disposal site with a high risk of encountering unexploded ordnance. It was discounted due to safety concerns.
- Option C (Southern Corridor): This corridor encountered extensive areas of hard seabed with steep gradients, increasing installation complexity and potential environmental impact.
- **Option B (Central Corridor) (Selected):** Designed to avoid both Beaufort's Dyke and the challenging seabed of the southern corridor. It offered:
 - Seabed conditions more conducive to cable burial.
 - Fewer crossings of existing subsea infrastructure.
 - Reduced interaction with designated sites such as the **North Channel SAC** and **Clyde Sea Sill MPA**.
 - Avoidance of known wrecks and archaeological features.

Option B was identified as the most technically viable and environmentally responsible corridor, aligning with best practice guidance and the principles set out in the marine route corridor preliminary routeing and siting study.

The main technical constraints in relation to this option would be the requirement for long trenchless installation methods at the two points of landfall to minimise disturbance to existing socio-economic considerations and Annex I habitat. Additional considerations such as early stakeholder engagement will also be required in relation to the UK National Site Network sites that will be traversed. Continuing engagement will also be required regarding commercial fisheries activity along the marine routeing corridor.

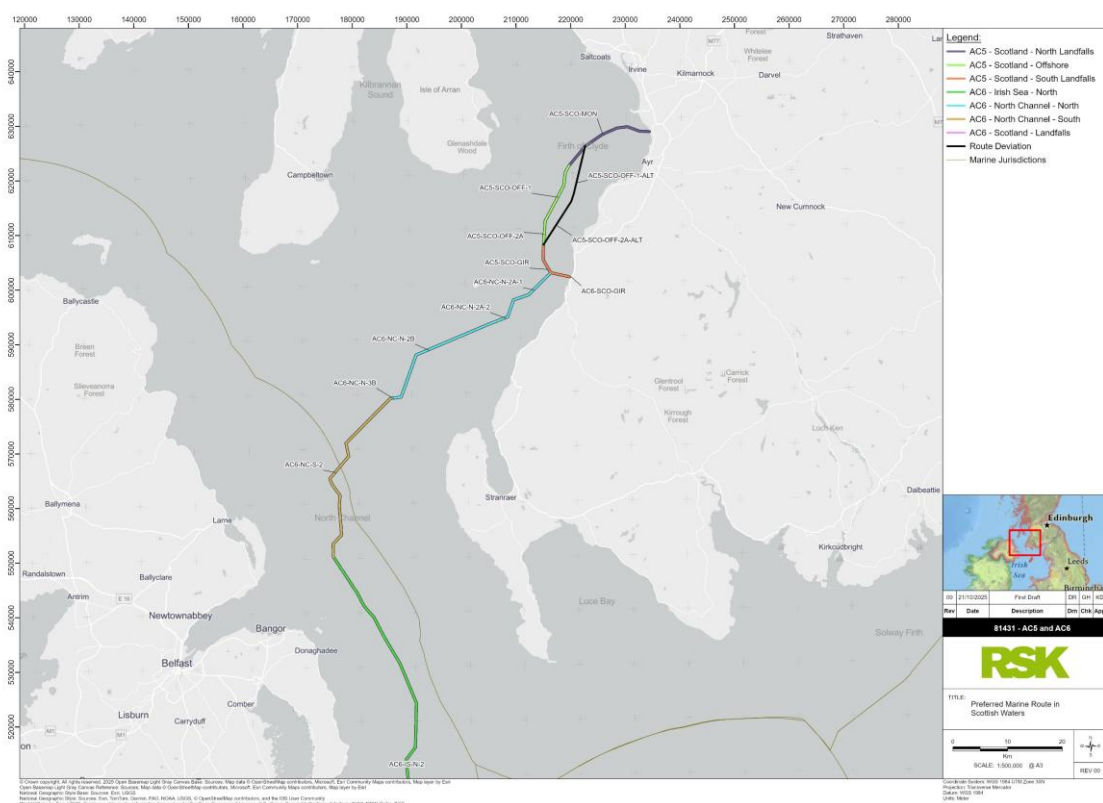


Figure 1: Preferred marine route plan

Programme and Next Steps

Marine stakeholder engagement began in April 2025. Following non-statutory consultation in late 2025, SP Energy Networks and National Grid Electricity Transmission will develop the scope of the environmental appraisals in consultation with marine stakeholders. This will be followed by statutory consultation and marine licence applications in 2026 and 2027. Marine surveys are ongoing to refine routing and assess installation risks.

