

# XLINKS DESKTOP STUDY & LANDING POINT ASSESSMENT MOROCCO-UK INTERCONNECTOR

**In 2020, work commenced to provide an electric generation facility entirely powered by solar and wind energy, combined with a battery storage facility. The innovative Xlinks Morocco-UK Power Project covers an approximate area of 1,500km and is connected exclusively to Great Britain via 3,980 kilometres HVDC subsea cables. The first-of-its-kind project could provide 8% of the UK's electricity needs.**

## PROJECT SCOPE

OceanIQ's extensive subsea knowledge was required by Xlinks to provide a Desktop Study (DTS) and a detailed Landing Point Assessment (LPA) for the proposed interconnector power cable linking Morocco to the UK. Utilising in-house cable data, route engineering, permitting, and consultancy services for power cable route planning projects, the OceanIQ team worked to deliver a detailed DTS, LPA and subsequent shallow water route with a maximum depth of 700m.

As part of the DTS, the Route Engineering Team identified high fishing risk areas, anchorages, and high density shipping areas, especially south west of the UK. Additionally, offshore and floating wind farms were considered, and avoided as part of the route planning. Furthermore, the Lisbon canyon off Portugal and Cap Breton Canyon off the South of France were also avoided.

The LPA involved site visits to two National Grid approved substations and near-shore areas surrounding these locations in the UK. The aim of this was to further enhance the DTS findings, and produce a solution that minimised conflict with other seabed users and maximised the future security of the new cable.

OceanIQ advised Xlinks of a cable route that considered the landscape, avoided perceived high risk areas and would provided the best cable security and optimal route.

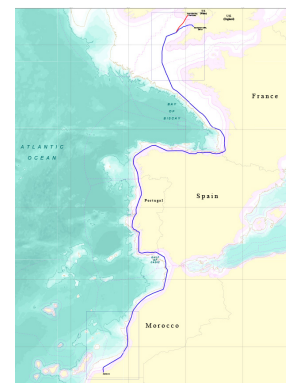
The following factors were assessed to produce the three cable routes options based on water depth:

- ✔ Researched bathymetry, seafloor and shallow seabed lithology, currents, weather, seismology, tides, permits, seabed users, seabed temperatures, fishing, shipping and anchoring.
- ✔ Investigated environmental and cultural aspects relating to the cable route, highlighting marine protected areas, statutes and regulations of the various authoritative bodies.
- ✔ Identified areas of potential difficulty for survey, installation, maintenance and possible sources of risk to the cable

In each of the five maritime jurisdictions crossed, there will be significant and detailed technical and environmental assessments required to obtain the necessary permits ahead of the survey and installation campaign. As part of the DTS, OceanIQ identified the requirements in order to secure the permits.

**"Xlinks chose OceanIQ to support us on our subsea routing research and LPA primarily due to their reputation and experienced team. For a project as ground-breaking and complex as the Morocco-UK Power Project, it's vital that we work with partners who can deliver to our exacting standards,"** Richard Hardy, Project Director.

- 3,980KM CABLE ROUTE**
- 3.6GW OF ENERGY TRANSMITTED**
- 700M DEEPEST DEPTH REACHED**
- CROSSES 5 MARITIME JURISDICTIONS**



Proposed shallow water route

OIQ010 v1