

NOTICE TO MARINERS

Moyle Interconnector Cable Repair

Campaign 2: Extension of deburial, retrieval of sealed ends, splicing in a length of spare cable, relaying on seabed and reburial by trenching

Notification of repair work to commence 25th August 2017

Mariners are advised that Moyle Interconnector Ltd are mobilising the vessel CS Skagerrak ([NEXANS SKAGERRAK](#)) to execute emergency repair work on the south IRC power cable in the North Channel. This notice provides some information about this work.

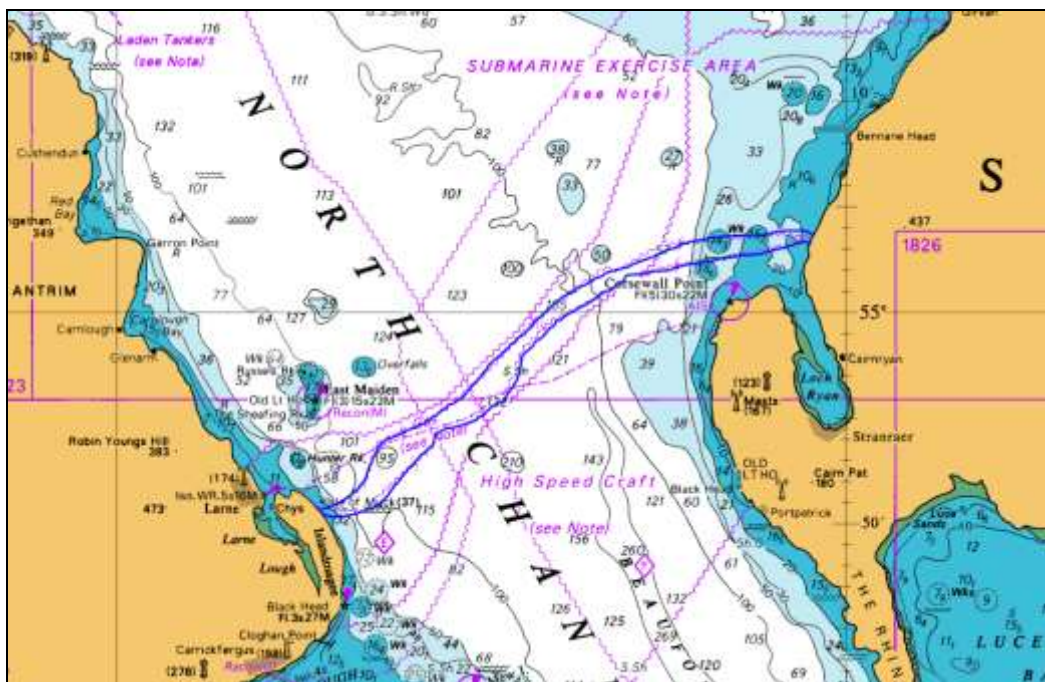
1. Project description

The Moyle DC Cable System consists of four undersea cables running between Scotland and Northern Ireland. The cables are buried along two (north and south) corridors as shown in the route below. Each corridor contains a buried high voltage 250kV cable (called the IRC cable) and low voltage 1kV return (called the MRC cable). The cables are a vital electricity link for Northern Ireland. The combined pairs of north IRC/MRC and south IRC/MRC corridors each convey 250MW of power independently. A fault occurred on the south IRC cable on February 18th 2017 rendering the south system unusable so the interconnector is currently operating at half capacity, 250MW, with the north cable system still intact.

Repair of this cable fault is intended to restore the interconnector to full capacity before winter 2017/18 and so enhance the security of electricity supply to Northern Ireland. It is staged across two campaigns. In Campaign 1, completed in May 2017, and utilising the vessel Elektron, Moyle successfully pinpointed the fault, recovered the section of the cable containing the fault and capped, sealed and returned the two respective ends into the original trench on the seabed. Campaign 2, now imminent, will utilise the vessel Nexans Skagerrak, to lift the sealed ends and splice in a length of spare cable with two joints, each joint being made on the aft of the vessel deck. The replaced section of cable will be retrenched. The site has been guarded in the intervening period between Campaigns 1 and 2.

2. Cable Route:

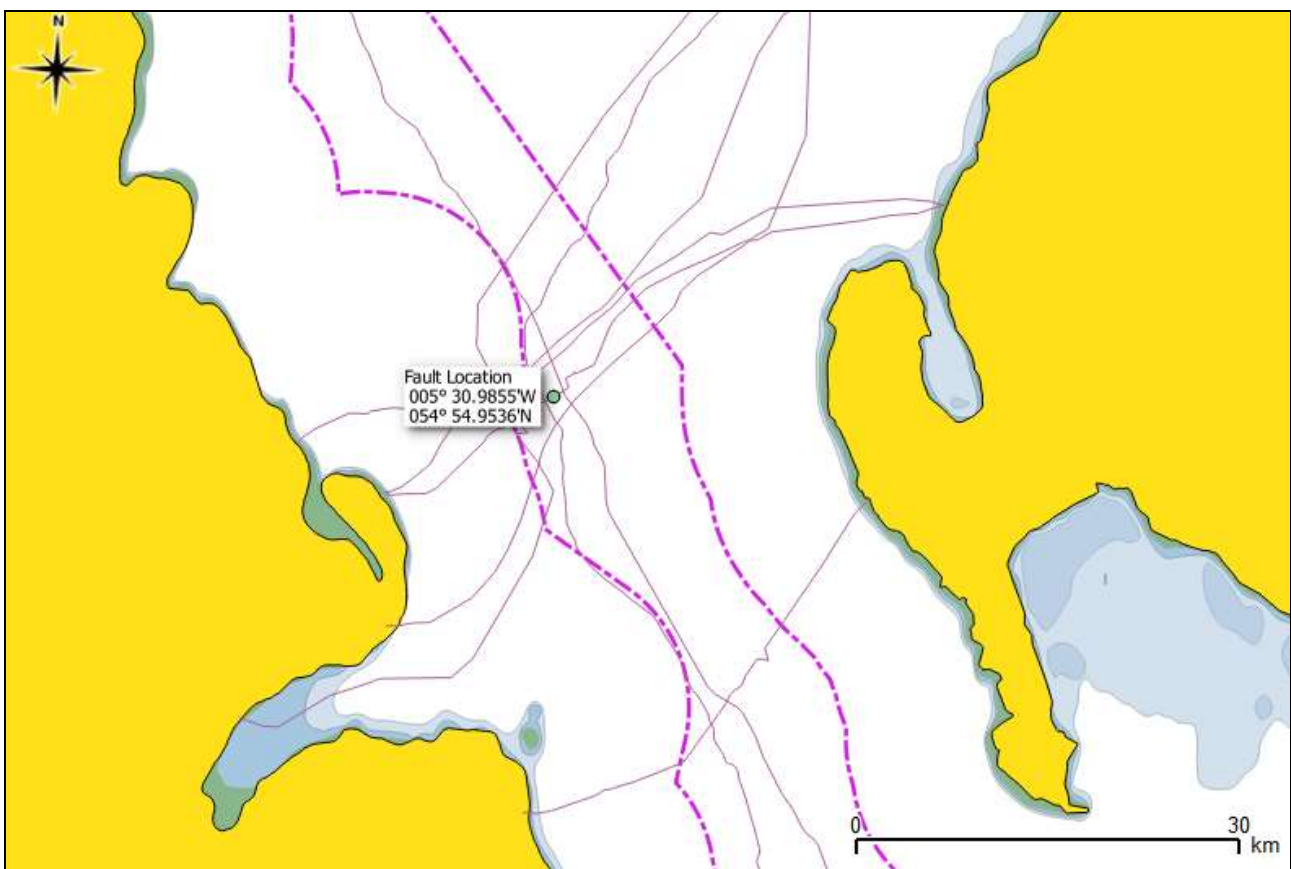
A map indicating the north and south cable routes is shown below.



The fault is on the south IRC cable at a point on the seabed centred around the coordinates given in the table below:

Item	Easting & Northing (ED50 UTM30N)		Latitude & Longitude (WGS84)	
	Easting	Northing	Longitude	Latitude
Fault location	338807	608859	005° 30.9855'W	054° 54.9536'N

This is marked on the map below.



At stages during the repair, the IRC cable will be lifted from the seabed with one cut end on the vessel deck. The catenary (length of suspended cable) may extend up to 200m either side of the vessel.

During these periods of handling and jointing the vessel will have **“Restricted Manoeuvrability”** and the cable will be in suspension in the water column poses an entanglement risk to other vessels. A safety exclusion zone of 1 nautical mile is advised whilst the vessel is on station.

If the vessel is leaving station, a guard vessel will be employed to advise mariners of the potential presence of unprotected power cable on the seabed and avoid damage of same.

The vessel will monitor and can be contacted on VHF Channel 16 at all times. Guard vessels will do likewise.

3. Equipment and Scope of Work

The work is being performed in two stages:

Campaign 1 – Vessel Elektron – completed through May 2017:

- Pinpoint the exact position of fault on seabed
- De-trench cable (approximately +/-350m centred on the fault)
- Cut out the section (circa 100m) containing the fault
- Seal and lay back down the cable ends in the existing trench

Campaign 2 – Vessel Nexans Skagerrak – mobilising 25th August:

- Extend the limits of deburial achieved in Campaign 1 from 700m to just over 1km, approximately 200m west and 100m east. This is required to ensure safe lifting and handling of the sealed cable ends for jointing and relaying of same
- Pick up cable western cable end and align for second joint
- Pick up eastern cable end and make first joint between end eastern cable end and spare cable
- Lay down circa 1km of spare cable, targeting original trench
- Pick up western aligned end and make second joint
- Lay down cable repair loop
- Protect inline section and new repair loop by trenching

4. Expected Duration of Works

The work is planned to take approximately six weeks, commencing 25th August 2017.

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