

NCT OFFSHORE

Sub-sea-Services



**SUBSEA and HV SUBSEA CABLE INSTALLATION
EXPERIENCE BY NCTO SENIOR STAFF
Cable Installation, Survey and Maintenance**

Track Record

International Project



INTERNATIONAL Waters

SITE	VESSEL(S)	Year
ATLANTIC OCEAN ROV & Survey operation	MV FREJA	2018 – Ongoing
NORTH SEA DK-waters OWF Vesterhav North and South Full Geotechnical and drill campaign	MV FREJA	2017
BALTIC SEA DK-waters OWF Krigers Flak Full Geotechnical and drill campaign	MV FREJA	2017
ATLANTIC-waters WROV Support Seabed survey and Salvage	MV FREJA	2017
DK-waters GEO technical operations	MV FREJA	2017
ATLANTIC-waters SURVEY support and Equipment test	MV FREJA	2017
NORTH Sea DK GEO DRILL operations	MV FREJA	2016
BALTIC Sea – North stream Project Geotechnical support	MV FREJA	2016



Track Record

Cable Installation, Survey and Maintenance



United Kingdom

SITE	VESSEL(S)
Gwynt Y Môr Offshore Wind Farm Installation of 37 array cables Survey Inspection covers Pre-lay, Post-lay, Post-burial Survey	CLV SIA MV LINE
West of Duddon Sands Offshore Wind Farm Installation of 33 kW inter array cables 12 Platform Connection Cables (PCC) 95 Inter Connection Cables (ICC) Survey Inspection covers Pre-lay, Post-lay, Post-burial Survey DOB Survey of Export Cable	CLV SIA MV SANDER 2 MV LINE Maersk RESPONDER
Greater Gabbard Offshore Wind Farm Multibeam survey of 152 inter array cables, 58 monopile and 2 met mast scour locations	MV LINE
Thanet Offshore Wind Farm Multibeam Survey of specified section of Thanet Offshore Wind Farm	MV SANDER 2
Walney Offshore Wind Farm Recovery and replacement of 1 PCC cable Procedure includes cable recovery, CPS installation on J-tubes and substation, installation of new cable, testing, termination and final reporting	CLV SIA CLV NICO
London Array Offshore Wind Farm Post-lay Burial of 33 kW inter array cables Post-lay burial and survey of 45 infield cables	CLV SIA MV SANDER 2 MV LINE CLV NICO
Gunfleet Sands Offshore Wind Farm Depth of Burial (DOB) Survey for 10 WTGs Multibeam (MB) Survey of 3.1 km ² Project included in-house data processing and final reporting	MV LINE
Gunfleet Sands Offshore Wind Farm 1 + 2 Installation of 33 kW inter array cables 44 cables were installed; work included load out, rigging, testing, burial, post-lay inspection survey and final reporting Repair, jointing and replacement of 500 m Platform Connecting Cables (PCC)	CLV NICO MV SANDER 2



Track Record

Cable Installation, Survey and Maintenance



United Kingdom continued

SITE	VESSEL(S)
<p>Thanet Offshore Wind Farm Second-end recovery of 132 kW export cable Re-installation and recovery of damaged cable 14 cables were replaced; work included jetting, post-lay burial and survey 30-40 cm burial depth was achieved in 120-130 kPa seabed</p>	<p>CLV SIA MV SANDER 2 MV LINE MV SANDER</p>
<p>LINCS/ LID (Lynn and Inner Dowsing) Offshore Wind Farm Assisting with installation of 33 kW inter array cables 30 cables were installed; work included rigging, testing and de-rigging, post-lay burial survey</p>	<p>CLV SIA</p>
<p>Kentish Flats Offshore Wind Farm Provision of Dive Support Vessel</p>	<p>CLV NICO</p>
<p>Greater Gabbard Offshore Wind Farm Installation of 33 kW inter array cable 20 km cable were installed; work included planning, load-out, rigging, pre-lay survey, burial and pull-in at offshore transformation station, post-lay burial and final survey documentation Total installation of 4 sandbank/Platform Connecting Cables (PCC) and 1 MET mast cable – all Tekmar Cable Protection System (CPS)</p>	<p>CLV SIA MV SANDER 2 MV LINE MV SANDER</p>
<p>Rhyl Flats Offshore Wind Farm Remedial Burial of 3 export cables Depth of Burial (DOB) ROV TSS Survey of export cable hotspots</p>	<p>CLV NICO MV LINE</p>
<p>Barrow Offshore Wind Farm Post-Burial Survey of export cable (27 km)</p>	<p>MV LINE</p>
<p>Walney Offshore Wind Farm 1+2 Post-Lay Inspection, Multibeam Echosounder (MBES), Depth of Burial (DOB) Post-Lay Survey Inspection of 44 km export cable via multibeam (MB) (only Walney OWF 1)</p>	<p>MV LINE</p>



Track Record

Cable Installation, Survey and Maintenance



Germany

SITE	VESSELS(S)
Gode Wind 02 and 01 Offshore Wind Farm ONGOING 2015 Installation and burial of 97 array cables Survey Inspection covers Pre-lay, Post-lay, Post-burial Survey	CLV SIA MV LINE
Borkum Riffgrund 01 Offshore Wind Farm Installation and burial of 43 array cables Survey Inspection covers Pre-lay, Post-lay, Post-burial Survey	CLV SIA MV SANDER 2 VOS SYMPATHY

Track Record

Cable Installation, Survey and Maintenance



The Netherlands

SITE	VESSEL(S)
Princess Amalia Offshore Wind Farm Cable recovery and replacement of 24 kW inter array cable Work included rigging, planning, burial, installation, termination and post-burial survey Project was successfully executed with only 4 days planning up front	CLV SIA



Track Record

Cable Installation, Survey and Maintenance



Denmark

SITE	VESSEL(S)
Horns Rev Offshore Wind Farm TSS Survey on Horns Rev 1 Pre-Survey on Horns Rev 2	MV SANDER 2
Anholt Offshore Wind Farm TSS Survey and Multibeam Survey	MV LINE
Energinet.dk Power Cable Testing via Survey	MV SANDER
Lillgrund Offshore Wind Farm TSS Survey	MV SANDER
Rødsand Offshore Wind Farm 1+2 HVDC Power Cable ROV TSS Survey	MV SANDER

