

N-Sea is an integrated subsea service provider. We offer a wide range of Survey and IRM services to civil contracting communities and the energy sector, focusing on the international oil and gas and renewable industry.

We meet our clients' needs. How? By providing effective and cost-efficient solutions for subsea assets and infrastructure, considering a safe environment.

N-Sea delivers subsea: from installation to decommissioning, from inspection through to maintenance management, we help assess the state of subsea assets and provide the necessary service throughout their entire lifecycle.

**WE LISTEN  
THEN DELIVER**

**“EXECUTING OUR STRATEGY  
IN AN IRREVERSIBLE WAY”**

We have the ambition to be the go-to total subsea solutions provider. We want to create a sustainable business, be less vulnerable and increase our profitability.

To realize this ambition, we have a clear vision and strategy relating our solutions, markets, geographies, and organization. To achieve these goals, we develop our organisation to the level of best in class being fully synchronised with our ambition and strategy by contributing to the following key success factors constantly:

- Qualified and engaged people
- Long term client relationships
- Strategic partnerships
- Innovative solutions
- Safety and quality 100%
- Visible presence

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**ENBW HE DREIHT  
GEOPHYSICAL AND GEOTECHNICAL SURVEY**

**PROJECT**

The EnBW He Dreiht project is located in the German North Sea (German Bight / Deutsche Bucht) within 85 km north of the island Borkum and 104 km west of the island Helgoland. N-Sea was awarded the scope of work for geophysical and geotechnical surveys of the cable routes and WTG locations by Seaway Offshore Cables.

**SCOPE OF WORK**

Geophysical investigation consisted of Multibeam Echo Sounder (MBES), Side Scan Sonar (SSS), Sub-bottom Profiling (SBP) and Magnetometer (MAG) surveys of the inner array cable route corridors. In addition, it covers an area around each WTG foundation. Before the start of the geotechnical campaign 64 locations were surveyed to exclude the presence of potential UXO.

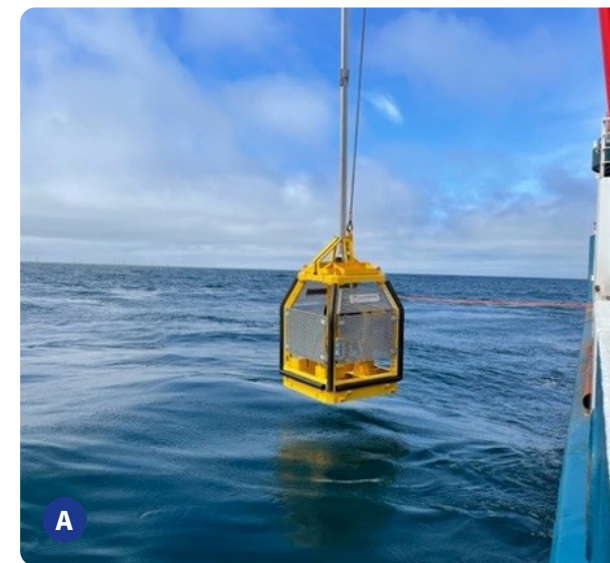
The geotechnical investigation contained the pairwise performance of cone penetration tests (CPT) and Vibrocores (VC) up to 5m below the seabed as well as a laboratory test program for soil classification. 64 locations have been investigated based upon total number of WTG's / cable links.

N-Sea's joint venture company UXOcontrol provided the UXO ALARP certificates for each geotechnical sample location and for all seafloor touching and intrusive works on the seabed in general.

N-Sea was in control of the entire scope of work and delivered an integrated geophysical & geotechnical report as part of the final deliverables to the client.

**FEATURES**

<b>Client</b>	Seaway7
<b>Location</b>	North Sea, German sector
<b>Period</b>	June - July 2022
<b>Assets</b>	OSV N-Sea Pathfinder
<b>Extra</b>	Geophysical and Geotechnical equipment





**A** CPT unit deployed from N-Sea Pathfinder **B** Vibrocore results from geotechnical laboratory **C** Vessel N-Sea Pathfinder operating offshore