



SeaTerra surveys and clears UXO contaminated areas on land and on water. We are specialized on windfarm areas and cable routes: Around 10.000 hectares seabed of the North Sea and Baltic Sea were investigated and declared free of unexploded ordnance (UXO)

Commissioned by several wind farm developers and transmission system operators, SeaTerra GmbH examined and cleared in recent years around 10.000 hectares seabed of the North Sea and Baltic Sea. In the course of these investigations some 4.000 suspicious objects were uncovered, identified and recovered. 160 pieces of UXO (sea mines, bombs, shells) were found, recovered or relocated. 50 not transportable sea mines had to be detonated underwater.

As part of the carried out ordnance investigations, 160 major unexploded ordnance targets (UXOs) were identified. The biggest part (e. g. grenades or partly destroyed mines) was classified as transportable and salvaged from the seabed. Usually these UXO are handed over to the Ordnance Disposal Authority, who is then responsible for the disposal.

The non-transportable ordnance (50 items, mostly sea mines) was demolished in situ by explosives specialists and ordnance divers of SeaTerra GmbH. All demolitions were thoroughly prepared and designed in close cooperation with the responsible regulators. Marine mammals were protected by scaring devices and a "Big Bubble Curtain" to minimize noise.

The ordnance clearance operations were preceded by comprehensive geophysical surveys. Approximately 10.000 ha of the seabed were surveyed with high-resolution magnetometers and partially with Side Scan Sonar, Multibeam Echo Sounder and Sub-bottom Profiler systems. Subsequent data interpretation led to the identification of thousands of anomalies. SeaTerra identified around 4.000 potentially dangerous objects and investigated and cleared them with the help of remote-controlled devices (ROV, airlift), cranes and ordnance divers.

A special feature was the geophysical investigation within the 500 m safety zone of the existing converter platform DolWin alpha. The work was carried out under the highest safety requirements and only under ideal weather conditions.



Picture (left to right):

UXO survey. Preparation of the scanfish system.

Target investigation inside the safety zone of the converter platform DolWin alpha.

UXO on board of the clearance vessel, ready to transport onshore.

Detonation after installation of the bubble curtain.