

Vessel selection and suppliers

To successfully navigate project locations, it is crucial to choose the right vessel and ensure it is equipped accordingly. This is a checklist to ensure that no crucial details are overlooked. Below you will find a list with examples of relevant vessels and suppliers.

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1. Requirements, certification and regulations

- **Requirements:** Inquire about the specific project location requirements and ensure compliance.
- **Certification:** Choose a vessel with the appropriate certifications, especially those that grant access to the wind park and meet required tests.
- **Rules and procedures:** Gather information on specific rules and restrictions onboard the vessel, including the vessel's protocols. Respect and adhere to instructions from the captain and crew.

2. Mobilization and demobilization

- **Loading and unloading:** Plan the loading and unloading of goods upon arrival at a dock. Coordinate with port authorities, such as Clarksons for smooth operations. Consider loading methods, especially if the ship lacks a crane. For instance, if installing a reef, cranes will be necessary.
- **Home port:** Determine the ship's home (or default port of berth) port and the travel distance to the desired location, for example, Vlissingen.

3. Necessary equipment

- **Personal protective equipment (PPE):** Understand the PPE requirements for your location, vessel, and wind park. Ensure the presence of appropriate safety gear on board, such as helmets and other protective equipment.
- **Monitoring equipment:** Confirm the availability of essential monitoring equipment on board, including where necessary an ROV (Remote Operated Vehicle) with preferably a 4k camera, distance/measurement lasers, switchable lights and equipment such as ropes, pulleys, duct tape, tie wraps and other essential tools.
- **Chemical supplies:** Pre-arrange any necessary chemical supplies, such as eDNA sampling materials (Bleach, RNA shield).
- **Customs documents:** Ensure that the required customs documents for import and export activities beyond the 12 km zone are in order.

4. Different types of vessels

- **Crew Transfer Vessel (CTV):** A CTV is a boat used for swift transportation, sometimes equipped with a small crane.
- **Survey Boat (SP):** The SP is a larger, slower boat used for seabed scans.
- **Multicat Vessel (MV):** The MV is a square-shaped boat with a platform and a relatively strong crane; some may have two cranes.
- **Dynamic Positioning (DP):** DP is a system that automatically controls a ship's position and course, commonly used when placing materials.
- **Service Operations Vessel (SOV):** An SOV is a hotel-style ship used for extended periods when ongoing activities need to be conducted.

5. Suppliers

Vessel	Type	Shipping Company
Acta Orion	DP2	Acta Marine
Ary	Survey	Van Laar Maritime
Assister	DP2	JD-Contractor
Bumblebee	Survey	Waterproof BV
Carboclyde	CTV	Opus Marine
Coastal Crown	Multicat and DP2	Acta Marine
Coastal Fighter	Multicat	Acta Marine
Dana	SOV en DP2	Esvagt
Deep Storm	Survey	Deep B.V.
Deep Volans	Survey	Deep B.V.
Dispatcher	CTV	Northern Offshore Services
Eems Wave	CTV	Amasus Shipping
FOB Swath 4	CTV	Offshore Windservice
FOB Swath 5	CTV	Offshore Windservice A/S
FOB Swath 7	CTV	Offshore Windservice A/S

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Vessel	Type	Shipping company
FPV Morven	CTV	A2Sea
Geo Focus	Survey	Geo Plus
Geosurveyor18	CTV	GeoXYZ
Helen Mary	Survey	Inverlussa Marine Services
Isle of Jura	DP2	Seafast
M/V Achiever	CTV	Northern Offshore Services
M/V Advancer	CTV	Northern Offshore Services
M/V Boarder	CTV	Northern Offshore Services
Manor Initiative	CTV	Manor Renewable Energy
MCS Coromell	CTV	Maritime Craft Services Clyde
MCS Elly II	Multicat	Maritime Craft Services Clyde
Merel-G	CTV	Rederij Groen
MHO Flash	CTV	WaveCraft
MV contender	CTV	Northern Offshore Services
MV Swift	CTV	Total Offshore BV
Njord Balder	CTV	Njord Offshore
Njord Forseti	CTV	Njord Offshore
Njord Puffin	CTV	Njord Offshore

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Vessel	Type	Shipping company
Njord Thunder	CTV	Njord Offshore
Njord Zephyr	CTV	Njord Offshore
Njord Zuider	CTV	Njord Offshore
Patriot	CTV	Braveheart Marine
Prosperous 2	CTV	Prosperous Wind
Sapphire	CTV	Mareel UK
SC Agate	CTV	Sima Charters
SC Falcon	CTV	<u>Sima Charters</u>
SC Rotterdam	CTV	<u>Sima Charters</u>
SC Topaz	CTV	<u>Sima Charters</u>
Seazip 3	CTV	<u>SeaZip Offshore Service</u>
Seazip 4	CTV	<u>SeaZip Offshore Service</u>
Seazip 5	CTV	<u>SeaZip Offshore Service</u>
Seazip 6	CTV	<u>SeaZip Offshore Service</u>
STB 12 / Wind 2	CTV	<u>Esvagt</u>
Stratcat 26	CTV	<u>Purus HST</u>
Umo Mistral	CTV	<u>U-Ming Marine Offshore Company Limited</u>
VOS Sugar	DP2	<u>Vroon</u>

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Vessel	Type	Shipping company
Vrijheid III	CTV	<u>Bos Marine Services</u>
Waterlines	CTV	<u>The Wagenborg Group</u>
Windea Three	CTV	<u>Van Laar Maritime</u>
Zwerver II	Multicat	<u>Van Stee Offshore</u>
Zwerver III	Multicat	<u>Van Stee Offshore</u>
Zwerver V	SOV	<u>Van Stee Offshore</u>