

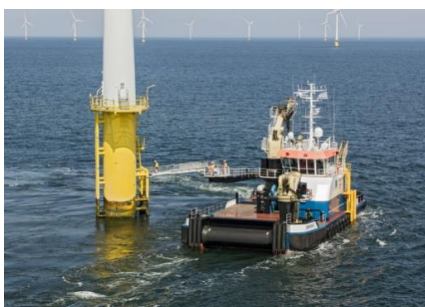
## Landing platform optimisation

A top priority in offshore maintenance operations is the safe and cost-efficient transfer of crew and equipment from ship to platform and wind turbines at sea. The positioning of the boat landing platform and the type of Offshore Support Vessel (OSV) can play an important role in this since the accessibility and safety might be improved by a smart positioning of the landing platform in combination with the type of OSV.

Thorough assessment of the operational envelope in the prevailing conditions for different landing platform and OSV combinations will contribute in optimising the transfer operation of maintenance personnel and thus reducing overall cost. MARIN can support you by carrying out accurate and reliable assessments in the conceptual phase and the design phase.

### Services:

- Conceptual phase: high level operability statement for certain landing platform.
- Design phase: optimisation of landing platform and OSV's.

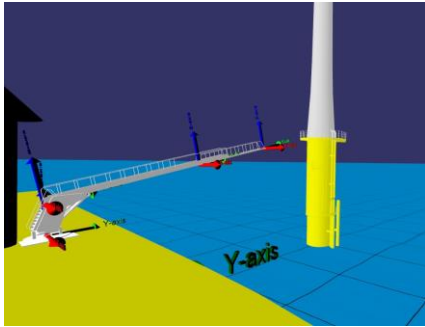


### *Conceptual phase: high level operability statement*

In the conceptual phase, a first assessment can support you in an operability statement for a typical OSV and landing platform for the prevailing sea state. MARIN can conduct this operability assessment by means of numerical simulations to give insight into the operational envelope. Various OSV-platform location combinations can be evaluated and compared on the key performance indicators safety, operational risk and maximum operability.

### *Design phase: optimisation study operability*

In the design phase, MARIN offers model tests in a wave basin and numerical simulations to assess the performance of your OSV-platform location combination under maximum sea state and to the safety level required by certification bodies. Focus in the assessment is on the investigation of potential locations for the landing platform.



#### Related products:

- O&M logistics
- O&M vessel selection
- O&M operational training
- WT landing platform alignment
- Wind farm traffic safety assessment
- Vessel seakeeping performance

For more information contact

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## State of the art tools

Developed in-house, aNySIM XMF is state-of-the-art software for hydrodynamic time domain simulations. The OSV vessel hydrodynamics will be embedded through a dedicated diffraction model that is suitable to determine the vessel motions as a function of seastate and direction. A dynamic positioning system can be incorporated to create a realistic operation of the OSV. In addition detailed assessments can be carried out in our high-end wave basins to gain insight into the physical interactions between the vessel (on DP), the turbine and potentially a gangway system. These model tests are essential in proof-of-concept demonstration and in certification (validation and verification).

## Expertise and experience

MARIN is an independent and innovative service provider specialising in hydrodynamic assessments and investigations. With over 80 years experience, we are fully conversant with challenging metocean conditions in Oil & Gas and renewable energy projects worldwide. MARIN offers services for hydrodynamic analysis of various types of installations and operations offshore. Our expertise includes concept validation, seakeeping, slamming, operability of jack up installation and maintenance, motion compensation and control, mooring, dynamic positioning and logistic scenario analysis.

This expertise and experience is used in performing operability studies for wind farm maintenance operations for walk-to-work vessels with access gangways to landing platforms.

