



LEAP JIP

LiabIE Access for Personnel

The objective of the LEAP JIP is to assess and reduce risks involved in crew transfers offshore.



Potential participants/partners:

- Wind park developers
- Wind park installation and maintenance companies
- Transfer technology developers
- Ship owners
- (Harbour) authorities
- Class societies
- Training institutes



Motivation and background

Offshore wind maintenance outlook

The number of wind parks in Europe and worldwide is continuously growing. The installation and maintenance of these wind parks require regular crew transfers. For large offshore wind parks, this can result in over 1,000 crew transfers per year. As the number of wind parks increases, so does the demand for new technicians, some of whom may have limited experience. This combination of frequent transfers and varying experience levels heightens the risk of incidents

Access methods

For crew transfer different access methods can apply. Within this project, the following access methods may be reviewed:

- CTV: step over to fixed and floating wind turbines.
- SOV: gangway access to fixed and floating wind turbines.
- Ship-to-ship transfer.

Expertise and experience

MARIN has participated in several Joint Industry Projects related to offshore maintenance and crew transfer, for example:

- SPOWTT JIP: onshore decision support and on-board advice system.
- O&M and O&M II JIP: workability for offshore wind maintenance vessels (CTV's and SOV's) during transit and transfer.
- OOAS: onboard advice for operability and planning.



Organisation

We aim at starting the JIP early 2025. It will be conducted as a 2-year Joint Industry Project in close cooperation with all participants. All participants will be represented in the JIP Steering Group with meetings every 6 months. Presentations, reports and other relevant info will be posted on the confidential common project platform.

Participant contributions

Participants are encouraged to share insight in company policy, training requirements and experience with critical situations and/or incidents during or in preparation of crew transfers.

Scope of work

The scope of work of the LEAP JIP will be divided into three subtasks:

- Evaluation industry standard and gap analysis.
- Assess global risk of incident.
- Means to reduce risk/increase safety.

Evaluation industry standard

To effectively assess the risk of incidents, it is crucial to have a solid understanding of common practices and industry standards. This subtask will cover the following topics:

- What are the rules and regulations and company policies? And which authorities are governing these rules and regulations?
- Review of existing incident reports and gap analysis.
- What are typical training requirements?
- Common practice and what are typical decision points on how to approach a transfer.

Assess global risk of incident

The objective of the LEAP JIP is to assess and reduce risks involved in crew transfer. For risk assessment the following aspects need to be considered:

- Risk based (risk for incident) vs workability based (cost-based availability) assessment:
 - What is the risk of injury within workability range, for different types of transfers?
 - Including human factor aspects (e.g. effects of sea sickness, experience).
- Typical number of transfers per year, including unexpected maintenance moments due to failure.
- Influence on risk due to specific location aspects, such as environmental conditions, additional ship-to-ship transfer required, e.g. mother ship to smaller vessels, risk of collision of vessels within wind park, long travel to location, transfer of equipment.

Means to reduce risk/increase safety

To mitigate the risk of incidents, various aspects of common practices—such as procedures, transfer technology, equipment transfer, and the impact of training—will be reviewed. The objective of this subtask is to collaborate with participants to develop improved common practices, ultimately reducing the overall risk of incidents during crew transfers.

The outcome of the project will be presented to the relevant authorities with the aim of achieving top-down implementation, ensuring a consistent and safe playing field.

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