

Spring Balanced Offshore Access Bridge (Seaqualizer)

Publieke samenvatting / Public summary

Background

Existing solutions for accessing wind turbines during high seas states are inherently unsafe and expensive energy guzzlers with limited operating window and load capacity. By combining modern hydro-pneumatics with the old métier of spring balance, a technology bringing significant improvements to these drawbacks is developed.

Objective

This project will build, test and analyze a prototype of the Seaqualizer, a spring balanced access bridge for safe, low-cost and energy efficient transfer of staff and cargo to wind-turbines. The Seaqualizer will increase their accessibility to >95%, decreasing downtime and the cost of installation, maintenance & intervention, leading to SDE+ savings of >€80 mln (2017-2023).

Short description of activities

Marin will build and test the prototype in a tank simulation, advancing the technology from TRL4 to TRL5. ECN and IHC will be involved in the design and evaluation of the prototype in order to assess its technical feasibility and the benefits of the innovation compared to existing solutions.

Results

The project has enabled the project partners to define the key design parameters required to build a full-scale prototype of the Seaqualizer. This full-scale prototype is to be co-designed, engineered, built and tested by strategically well positioned

Projectinformatie / Project information

Projectnummer / Project number
TEHE115052

Subsidiebedrag / Grant amount
€ 445.269,00

Algemene informatie / General information

Penvoerder / Secretariat
NHLO

Publicaties en materialen / Publications and attachments

- 28.01.2019

Eindrapport TEHE115052

Links

- Video Material (Marin, 2017)
- Spring balance offshore access bridge, EERA JP Wind
- SeaQualizer, NHLO

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player(s) in the offshore access market, advancing the technology to TRL6 and validating the generic technology of spring balanced offshore motion compensation.

See also: [SeaQualizer Prototype](#)

De data in deze applicatie is afkomstig van de Rijksdienst voor Ondernemend Nederland (RVO) en wordt in samenwerking met de Topsector Energie ontsloten.

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