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Orcelle Horizon

Wind as main propulsion

Deliverable D7.5 - Report on Cooperation with European Projects and Initiatives

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Abstract

Deliverable abstract	

There are several other projects and initiatives on using wind, and additional projects are anticipated. Collaboration with such projects will contribute to the successful realisation of the objectives of Orcelle Horizon by strengthening dissemination, gathering feedback, and fostering knowledge uptake. This report describes collaboration activities with other European projects and initiatives in the project thus far, focusing on joint workshops organised with the WHISPER and Optiwise projects and other collaborative dissemination activities.

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1 Introduction

The decarbonisation of maritime transport hinges on more than technological innovation – it requires deep cooperation across projects, sectors, and borders. Within the Horizon Europe programme, several complementary initiatives are actively exploring wind propulsion and energy-saving technologies for commercial vessels. In this ecosystem, coordination and cross-project engagement are not just beneficial, but strategically essential.

This report outlines the collaborative activities undertaken by the Orcelle Horizon project with other European initiatives. It highlights two key avenues of cooperation:

- Joint workshops organised with the EU funded projects Optiwise and WHISPER
- Broader joint dissemination and knowledge-sharing efforts facilitated through partner networks

These collaborations support shared goals around innovation uptake, regulatory readiness, and wider stakeholder engagement. By aligning efforts with like-minded projects, Orcelle Horizon enhances its ability to scale wind propulsion technologies and shape a unified narrative for sustainable shipping in Europe.

2 Joint workshop with Optiwise

In January 2024, Orcelle Horizon held an online joint workshop in cooperation with the EU-funded Horizon project Optiwise (www.optiwise-project.eu). The topic was “Rules and regulations affecting ships with wind propulsion”.

In the Optiwse project, one of the aims was to design several ships with wind propulsion. The issue on how to treat rules and regulations for ships with substantial wind propulsion was a critical point in the design work. Several gaps and problems were identified.

In the Orcelle project, DNV has made an overview and gap analysis of the rules and regulations. In the joint workshop, four experts from DNV participated along with experts from RISE representing both Optiwise and Orcelle Horizon. The outcome was an exchange of information which enriched both projects.

3 Joint workshop with WHISPER

In September 2024, the Orcelle Horizon project co-hosted a joint workshop at SMM Hamburg with the EU-funded WHISPER project (www.whisperenergy.eu). The workshop focused on wind technologies for shipping, with the title “Wind for Power & Propulsion.”

WHISPER aims to demonstrate around 30% fuel savings on a retrofit bulk carrier and up to 15% on a retrofit containership through a fully modular retrofit solution, comprising a wind-solar hybrid power system to significantly reduce auxiliary engine emissions and a tilting wing sail system to provide wind-assisted propulsion.

The event was very popular with around 50 participants and featured technical and general presentations from both projects. The workshop facilitated knowledge exchange between project partners and industry stakeholders, establishing a platform for potential collaboration on regulatory frameworks for wind propulsion systems. We also included the audience in group work and opened up for discussions. The event was widely communicated in the newsletter, on LinkedIn and on the website.

Agenda and Key Activities:

- **Opening Remarks:** The workshop was opened by Gabriel Mialocq, Head of Sector Waterborne and Aviation R&I at CINEA, who emphasised the strategic importance of wind propulsion projects under the Horizon Europe framework in achieving the EU’s decarbonization targets.
- **Project Presentations:**
    - Jørgen Westrum Thorsen, Senior Manager, Sustainability at Wallenius Wilhelmsen, presented the Aim, Status and Ambitions of the Orcelle Horizon project, outlining the operational progress of wind propulsion systems and their projected impact on reducing GHG emissions.
    - **WHISPER Project:** Alex Albertini, President of Ant. TOPIC, introduced the WHISPER project, focusing on the integration of wind and solar power solutions in maritime transport and the role of hybrid systems in extending operational efficiency.

- **Technology Presentation:** Niclas Dahl, Managing Director of Oceanbird, presented the technical aspects of wing sails derived from airplane technology, highlighting design modifications to optimize performance under varying wind conditions.
- **Hybrid Wind and Solar Systems:** Romain Grandsart and Thibaut Tincelin from Oceanwing and Stirling Design International discussed the potential for integrating wind and solar systems to maximize power generation and reduce fossil fuel dependence.

Fig. 1. Images from joint workshop with WHISPER at SMM 2024.

4 Joint dissemination efforts through partner networks

Orcelle Horizon has also utilised partner networks for dissemination, communication, and stakeholder engagement. For example, MCT serves as coordinator and/or communications lead in several EU-funded initiatives, including STEESMAT, LOWNOISER, Apollo, Ship-aH2oy, and Flagships. Through regular stakeholder meetings, thematic seminars, conferences and trade events, MCT facilitates exposure for these projects and ensures consistent, strategic communication across consortia. Efforts are often synchronised across projects to strengthen stakeholder reach, build community, and increase the impact of dissemination activities. Examples:

- **Chasing Zero Conference** – Organised annually by MCT, this flagship event convenes key stakeholders from across the maritime value-chain. Alongside other innovative EU projects, Orcelle Horizon was featured prominently in the programme in both 2023 and 2024 with presentations from key partners.

- **Nor-Shipping** – Orcelle Horizon was featured alongside other EU-funded projects at MCT's community stand during this leading maritime industry event in both 2023 and 2025. In 2025, Orcelle Horizon was spotlighted in a "Blue Talks" session titled "Decarbonisation & Funding Opportunities", moderated by Ada Martine Jakobsen, CEO of MCT. Jan Tarjei Kråkenes, Head of Orcelle Accelerator at Wallenius Wilhelmsen presented key lessons from Orcelle Horizon, while MCT, Reach Remote and PwC Greece shared experiences from other European projects.

- **TechUpdate** – In April 2025, MCT hosted a webinar on “Leaner & Greener Operations at Sea”, focusing on energy-saving solutions for shipping. The event was co-hosted by Orcelle Horizon and STEESMAT and featured presentations from both projects as well as other leading companies in the maritime industry. Representing Orcelle, Vår Emilie Kjærnes, Innovation & Sustainability Manager at Wallenius Wilhelmsen, gave a presentation titled “Saving Fuel & Setting Sails”.

- **Open Wind Propulsion Workshop** – The Greek Section of SNAME and RISE, supported by NTUA, jointly organized an open workshop on the potential of wind ship propulsion in Athens on November 20, 2024. This event was specifically directed towards Greek shipowners, ship managers and ship operators who want to learn more about the potential and prospects of wind-assistance technologies. Six European wind propulsion system providers, including Oceanbird and RISE presented their concepts to the partcipants. More than 150 representatives of the Greek shipping industry and academia/students attended.

These collaborative dissemination activities have expanded the project’s visibility, opened new avenues for stakeholder engagement, and helped position wind propulsion as a viable tool in the maritime decarbonisation toolbox.

5 Conclusion

The collaboration with the WHISPER and OPTIWISE projects represents a valuable step in developing structured knowledge exchange between European initiatives focused on wind propulsion. The joint workshops enabled both projects to share their objectives, technologies, and insights with an engaged audience of industry stakeholders, regulators, and fellow researchers.

Likewise, the Open Wind Propulsion Workshop in Athens had a tremendous outreach to the Greek shipping industry and enabled the parallel presentation of ORCELLE and alternative wind propulsion system concepts developed and marketed by the European maritime industry.

Looking forward, Orcelle Horizon intends to expand its collaborative network by:

- Monitoring developments in new and existing EU funded initiatives on maritime decarbonisation in general and wind technologies for shipping in particular
- Hosting additional joint workshops or other events with other EU funded projects to coordinate dissemination efforts and foster knowledge exchange
- Coordinating dissemination efforts to reach broad and strategically important audiences, including international regulatory forums such as the EU and IMO.

Strategic cooperation will continue to be a key enabler for Orcelle Horizon’s goal of establishing wind propulsion as a credible, scalable solution in the global maritime sector.