

Nemoship EU Project Newsletter



NEMOSHIP

02 April 2024

PHOTO OF THE KICK-OFF MEETING IN NANTES



Here's an overall presentation of the Nemoship project !

Dear Reader,

We hope you are well. We are very happy to share with you the 1st newsletter of the NEMOSHIP project which started in 2023.

NEMOSHIP is a 4 year project awarded under the Horizon Europe Scheme and relates to electrification of maritime transport.

In this newsletter we tell you more about the objectives of the project and the the work programme.

Best regards on behalf of the

Nemoship team

NEMOSHIP's Objectives

The ambition of the NEMOSHIP project (2023-2026) is to develop, test and demonstrate new innovative technologies, methodologies and guidelines to accelerate large battery energy storage system (BESS) deployment and optimal exploitation toward 2030.

To reach this ambition, NEMOSHIP will develop:

- a modular and standardized battery energy storage solution enabling to exploit heterogeneous storage units and
- a cloud-based digital platform enabling a data-driven optimal and safe exploitation.

The project will demonstrate these innovations at TRL 7 maturity for hybrid ships and their adaptability for full-electric ships.

In this newsletter you can expect:

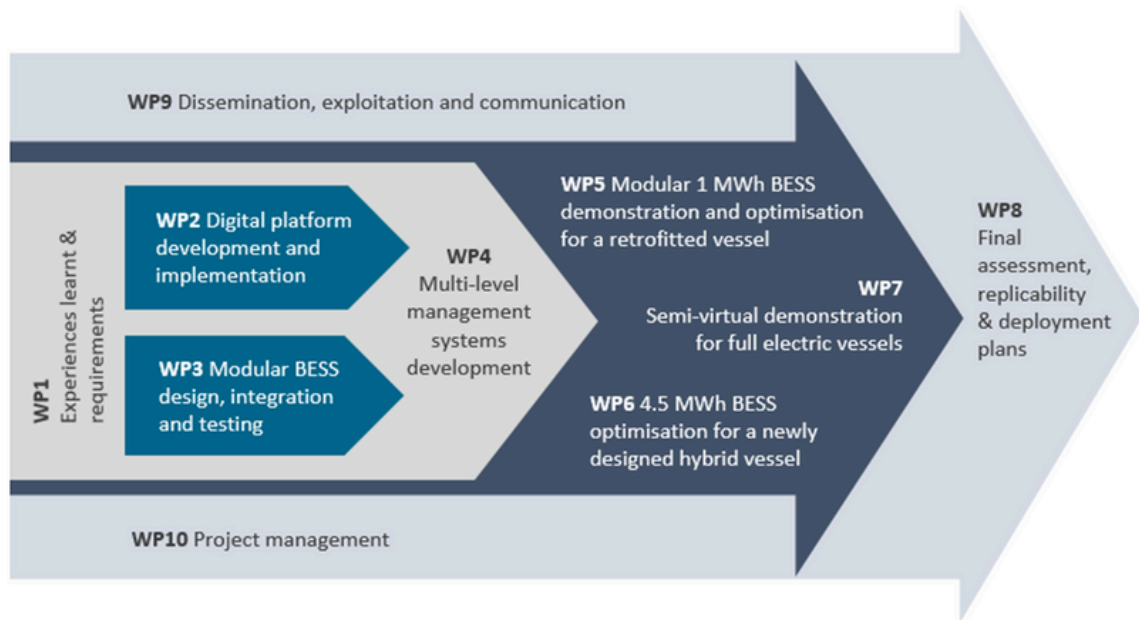
Overall presentation of the project

Objectives of the project



Co-funded by the European Union

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Overall Nemoship's project presentation

The NEMOSHIP consortium is composed of 11 partners (3 RTO, 1 SME, 7 large companies) distributed into 10 workpackages and covers the whole value chain, from research-oriented partners to software developers, energy system designers, integration partners, naval architects, and end-users.

The project is led by the French Alternative Energies and Atomic Energy Commission (CEA).

NEMOSHIP project is subdivided in 10 work packages (WPs). In WP1, led by Cidetec, the aim is to lay the foundation for the project by:

- reviewing ongoing/past projects in relevant sectors,
- gather experiences learnt from installation and operation of BESS on vessels,
- define requirements for the case studies as well as for the two NEMOSHIP innovations: the modular and heterogeneous battery energy storage system (BESS) and the digital platform.

WP2, led by Siemens, focuses on the development and implementation of the digital platform. The aim of the platform is to provide an optimal and safe exploitation of the BESS. This WP also includes the development of four digital twins: one for each of the demonstration vessels and one for each of the two full electric semi-virtual case studies.

WP3 is led by Corvus and is about the modular BESS design, integration and testing on the Solstad offshore demo vessel.

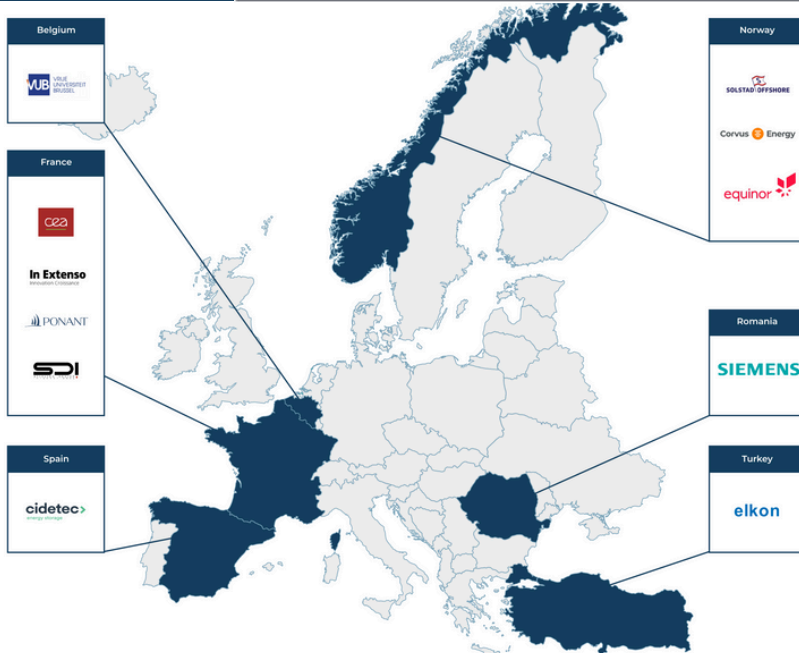
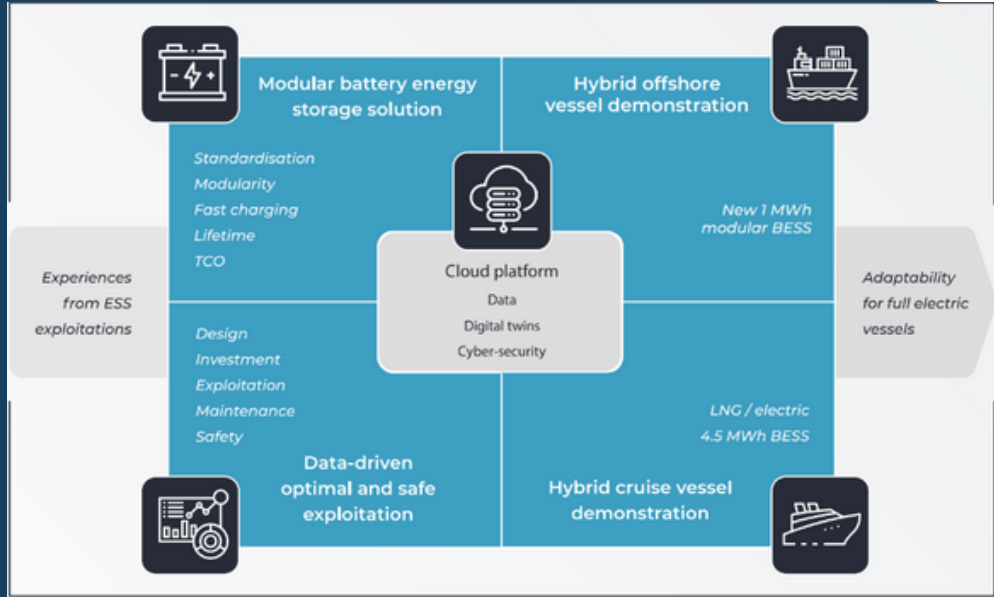
WP4, led by CEA, focuses on the development of algorithms for the management of large BESS with the objective to optimise on-board exploitation.

WP5 and 6 are about the Solstad and Ponant hybrid demonstration vessels; they both include demonstration of the NEMOSHIP innovations over several months in real conditions and starting next year.

WP7 is led by Elkon and is focused on application of the NEMOSHIP innovations to two full-electric semi-virtual case studies. These case studies are called "semi-virtual" as they are not "real vessels" per se but looking at future full-electric vessels with routes of 100 to 300nm; their characteristics are defined by the NEMOSHIP consortium using literature data and expertise from the consortium and demonstration will be carried out using hardware in the loop (HiL) platform.

Then, WP8 is led by Equinor and is about final assessment of the project, replicability and deployment plans for NEMOSHIP solutions. WP9, led by In Extenso, focuses on dissemination, exploitation and communication while WP10, led by CEA, is the management WP

The four specific objectives



Nemoship's Partners



2 vessels will be used to demonstrate NEMOSHIP'S innovations

An offshore vessel from Solstad

An exploration vessel from Ponant

LET'S KEEP IN TOUCH



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