

WP6 - 4.5 MWh BESS optimisation for the Ponant newly designed hybrid vessel

D6.1: Report on ESS exploitation and test program - Public Summary:

The ambition of the NEMOSHIP project is to develop, test and demonstrate innovative technologies, methodologies and guidelines to accelerate large BESS deployment and optimal exploitation toward 2030 on both hybrid and fully electric configurations. To help achieve this ambition, the NEMOSHIP project has developed a cloud-based digital platform to improve BESS operation and performance through data-driven analysis and optimisation modules.

One objective of the project is to demonstrate the improvements generated by deploying and using this digital platform to optimise the operation of the 4.5 MWh ESS installed on Ponant's demonstration vessel, Le Commandant Charcot.

To achieve this, the report focuses on:

- Reporting the results of data analyses covering the first years of operation with the existing monitoring and management systems, in use since 2021, without additional strategies or guidance for the crew.
- Defining a test and evaluation programme to assess the improvements provided by the NEMOSHIP digital platform through dedicated analyses and operational guidance.