

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

D6.2: Handbook on online deployment and exploitation of digital platform on-board - Public Summary:

The ambition of the NEMOSHIP project is to develop, test and demonstrate innovative technologies, methodologies and guidelines to better optimise large electric battery power technology within hybrid and fully electrically powered ships. To help achieve this ambition, NEMOSHIP is developing a 1 MWh modular and standardised battery energy storage solution (BESS) that is able to exploit heterogeneous storage units and a cloud-based digital platform to enable data-driven, optimised and safe exploitation. The project will demonstrate the maturity of these innovations at TRL 7 for hybrid ships as well as their adaptability towards fully electric ships.

The maritime sector is rapidly evolving as digitalisation and decarbonisation reshape ship operations. Modern vessels, especially hybrid and battery-supported ships, generate increasing amounts of data that can be used to improve efficiency, safety and environmental performance. In this context, the NEMOSHIP project is developing a next-generation digital platform that supports operators in making data-driven decisions at sea and on shore.