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HORIZON EUROPE PROGRAMME – TOPIC: HORIZON-CL5-2022-D5-01-02



AENEAS

innovActive ENERgy storage systems onboArd vessels

Deliverable D 2.2

Vessel simulation models for the 3 use-cases and
constrains of optimization

Deliverable Type	Report
Dissemination Level	Sensitive
Due Date (Annex I)	31.01.2024 (Month 12)
Pages	48
Document Version	Final
GA Number	101095902
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Public Summary

This document is a part of Task 2.2 of Work Package 2 – Concept design and optimization. The main objective of this task is to develop vessel simulation models for the 3 AENEAS use-cases, using the high-level ESS and Power/Energy management systems developed in T2.1, as well as the innovative ESS models developed in WP3.

These model will integrate the three AENEAS ESS (SSB for port stay phase, SC for the manoeuvement phase and hybrid system for an Inlad Motor Freighter). They will be the starting point of the optimization process, and will serve to identify all the constraints and objectives that the optimization must follows to provide viable results.

In this document, a detailed description of the simulation framework as well as the main model assumptions is done, and preliminary model are described for the three application, and some results are compared with operation profiles provided by T1.2.