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AENEAS

innovActive ENERgy storage systems onboArd vessels

Deliverable D 4.1

ESS module sizing and conceptual system design
including BoP



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Project Coordinator	Mohsen Akbarzadeh Flanders Make (FM) (Mohsen.Akbarzadeh@flandersmake.be)

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Public Summary

This deliverable discusses the conceptual design of the ESS modules that are developed in the AENEAS project. Firstly, the module design requirements are covered, taking into account the constraints the load profiles place on the modules, as well as the constraints that test facilities place on the modules for testing later in the project. Secondly, upon concluding these system requirements and design constraints, the conceptual designs are discussed for the three use cases and the corresponding energy storage system concept: solid state batteries and supercapacitors. For each use case, the conceptual designs focus on the electrical sizing based on the requirements and constraints, the consecutive thermal sizing, the mechanical packaging design, and the balance of plant considerations.