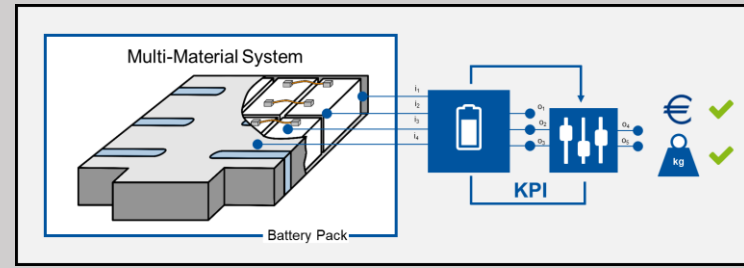
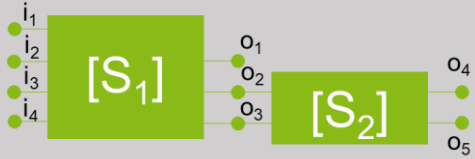


Joint Partner Project:



Elaboration of a pragmatic approach to apply Model-based System Engineering (MBSE) for automated structure and cost calculation

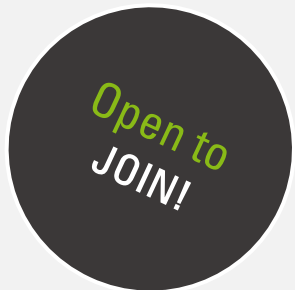


The Objective:

MBSE enables complexity management in development processes. It allows the transition from today's document-based, isolated optimization based on separated models to a parameter-controlled development process. Thus, the comprehensive multi-material lightweight design and its multi-modal and multi-criteria problems can be solved in one consistent system model. The project aims at providing know-how for the implementation of MBSE to the specific requirements for the development of composite components by means of an exemplary application scenario.

Your Benefits:

- Assessment of the process compatibility in the company for multiple applications
- Identification of battery housings as application for multi-material systems
- Standard for system models as basis for further research activities
- Comprehensive report of project results with updated state-of-the-art
- Cost sharing while having full results
- Networking across a common subject



Our Content:

- Requirements and preliminary concepts
 - Definition of program and system model framework
 - Definition of requirements and evaluation of model landscape
 - Development of geometrical and material concepts
- Set up process & system model
 - Set up of system model and sub-models
 - Interconnection of models
 - Modeling of interactions and feedback opportunities
- Demonstration of procedure at case study "Battery housing"
 - Analysis and optimization of the total system
 - Development of efficient optimization strategy
 - Optimization of battery housing

Model-based System Engineering
Project Procedure – Work package (WP)

Project Description
Use-Case: Battery Housing Structural Design Module

Use-Case: Battery Housing
Systems Analysis and Optimization

Model-based Systems Engineering
Solving approach for multi-model and multi-material systems

Benefits:

- Final report of project results with updated state-of-the-art
- Assessment of the process compatibility in the company for multiple applications
- Identification of battery housings as application for multi-material systems
- Standard for system models as basis for further research activities

Participation fee
12,500.00 € per participant

Project start:
October 01st, 2020
Duration: 12 months

Please contact for information and individual offer:

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