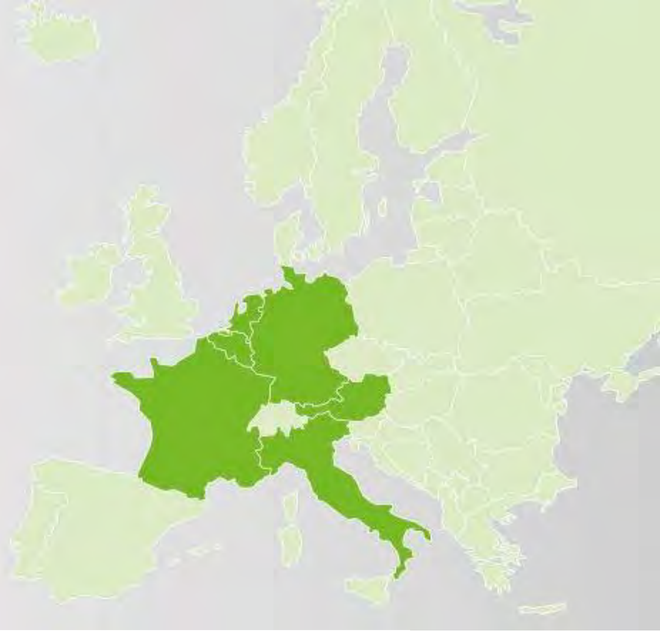
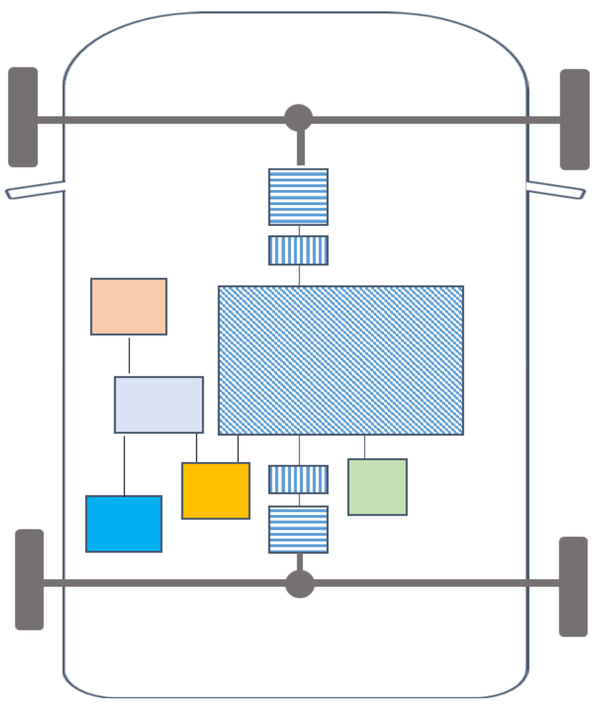
CEVOLVER

Connected Electric Vehicle Optimised for Life, Value, Efficiency and Range

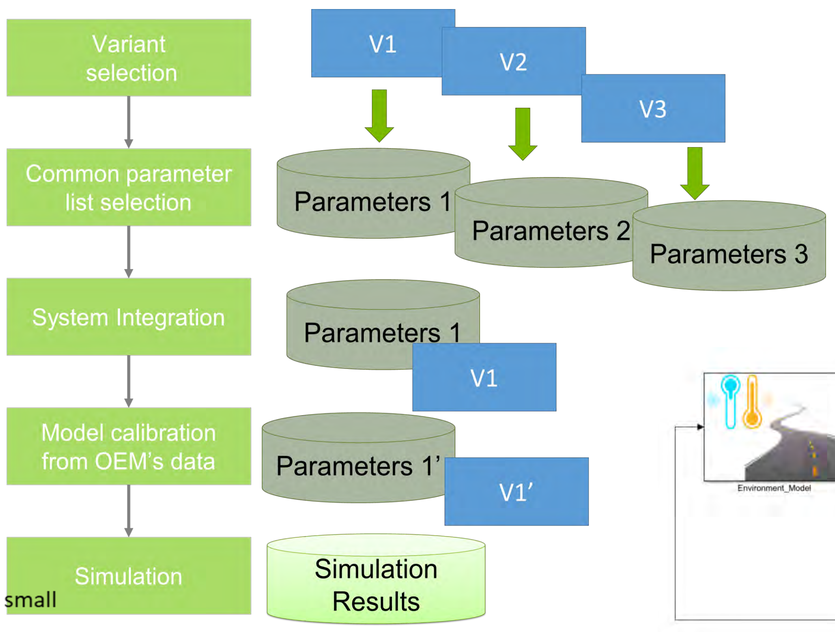


Parameterized Cloud-Connected Electro-Thermal Modelling of a Battery Electric Vehicle

This concerns the development of a virtual simulation framework that assists in developing advanced energy and thermal management strategies using cloud-connected information for different functional architectures of the thermal system. In CEVOLVER project, the simulation framework used in the early design phases aids in the sizing of components for the demonstrator vehicles.



- E-machine
- Inverter
- HV Battery
- On-board charger
- LV DC/DC converter
- LV battery
- Heat Pump Circuit
- Other auxiliaries (lights, small electronics)



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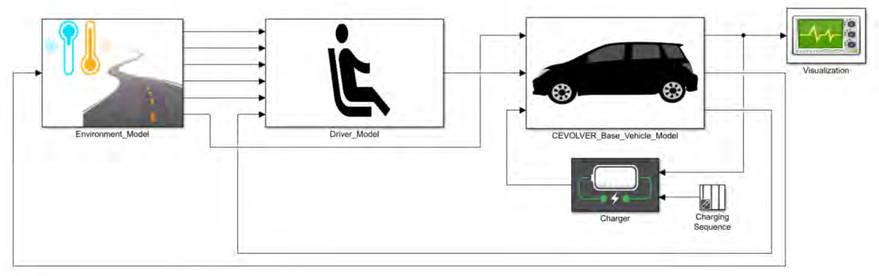
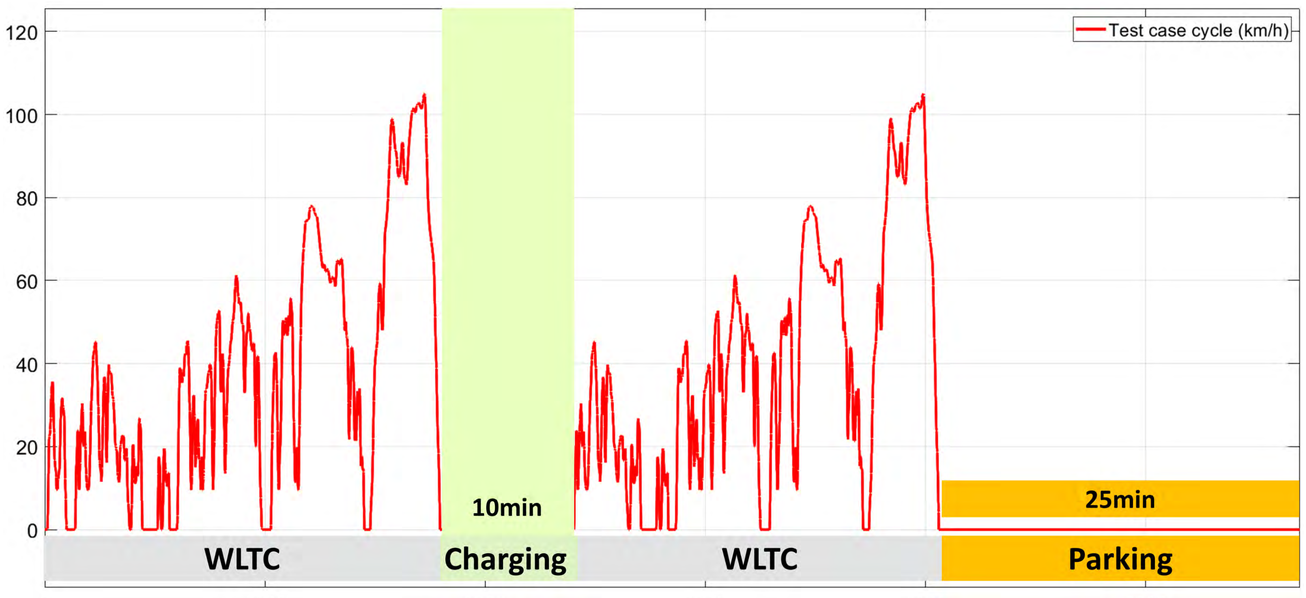
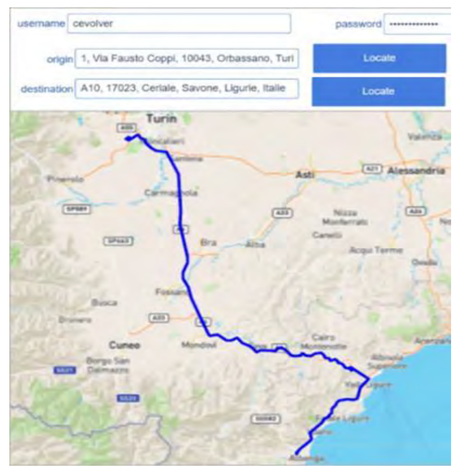


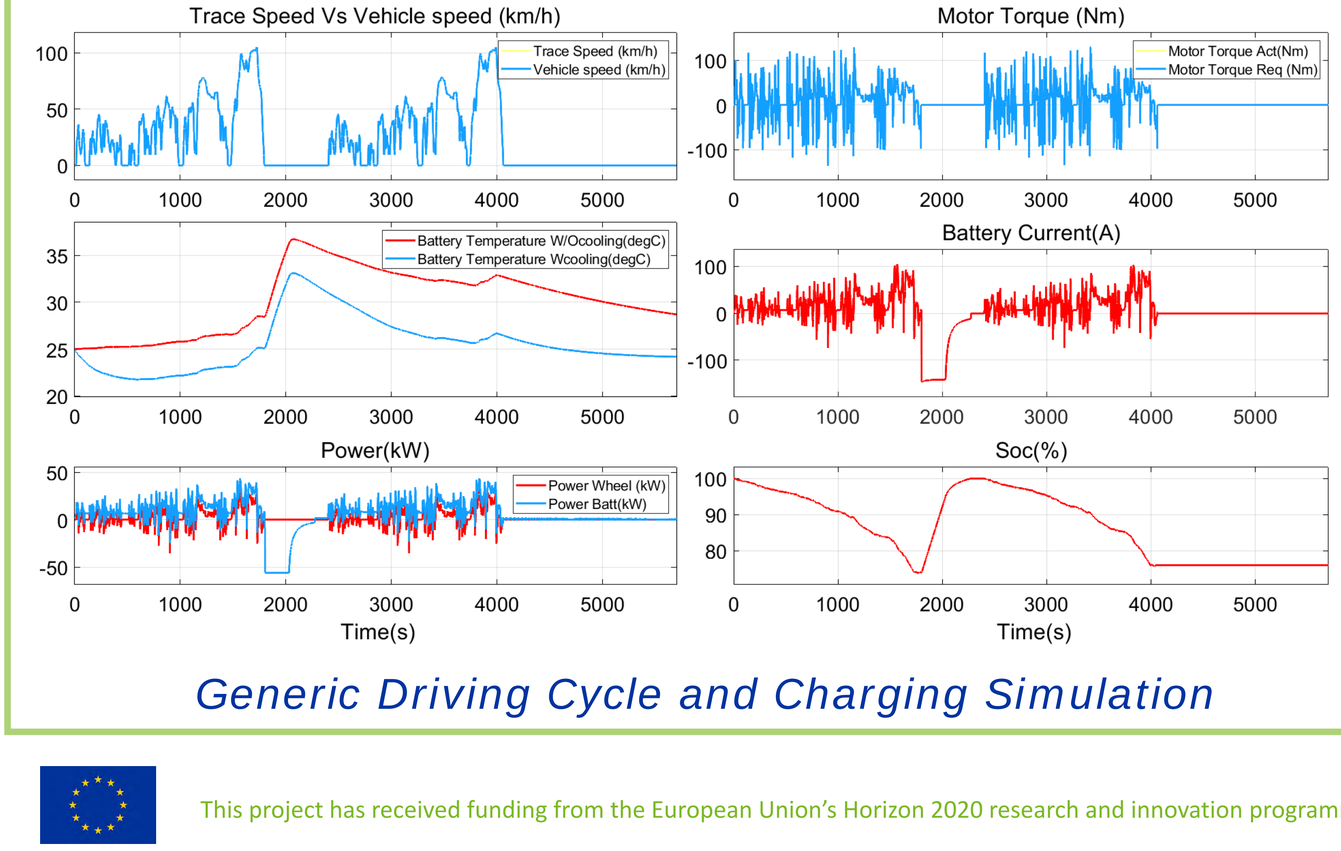
Integration of parameterized sub-system models into 'generic" base vehicle model and base vehicle model capable of simulating driving and charging events



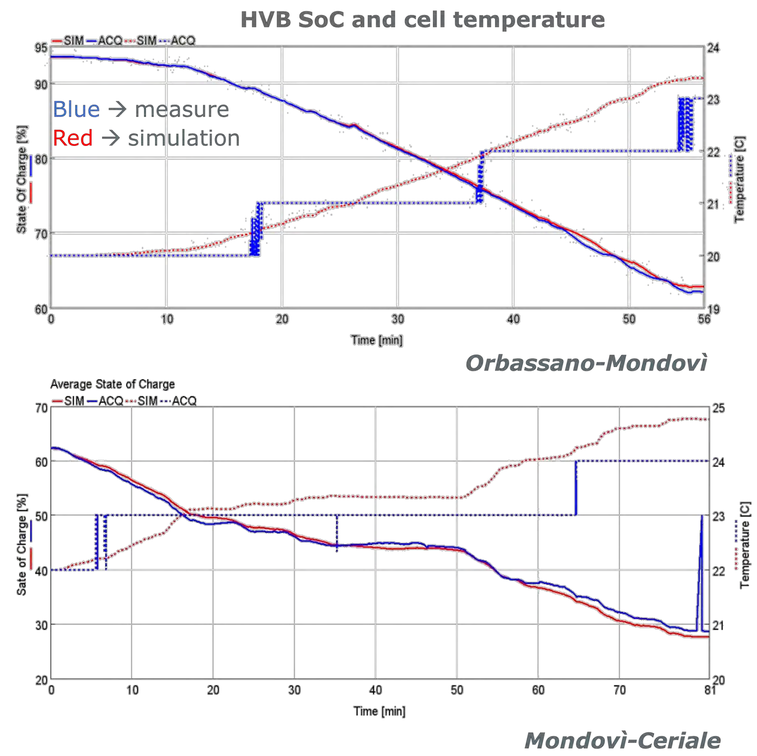
Demo vehicle: Fiat 500e

- *42 kWh Li-ion battery, EM of 87 kW & 220 Nm peak*





Generic Driving Cycle and Charging Simulation



Higher goodness-of-fit: simulation and measurec

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HTTPS://CEVOLVER.EU