



FASTEST

Fast-track hybrid testing platform for the development of battery systems



CONTACT US

 @fastest-project

 contact@fastestproject.eu

 www.fastestproject.eu



FASTEST GOAL

The FASTEST project aims to develop and validate a fast-track testing platform able to deliver a strategy based on the Design of Experiments (DoE) and robust testing results, combining multi-scale and multi-physics virtual and physical testing. This will enable accelerated battery system R&D and more reliable, safer and long-lasting battery system designs.

The project's prototype of a fast-track hybrid testing platform aims for a new holistic and interconnected approach. From a global test facility perspective, additional services like smart DoE algorithms, virtualized benches, and DT data are incorporated into the daily facility operation to reach a new level of efficiency.

During the project, FASTEST consortium aims to develop the platform and its components: the optimal strategies according to three different use cases (automotive, stationary, and off-road). The development of a complete set of physic-based and data-driven models able to substitute physical characterization experiments and the overarching Digital Twin architecture managing the information flows and proven and integrated prototype of the hybrid testing platform.

FASTEST OBJECTIVES

- 1 To develop and test the fast-track hybrid testing platform.
- 2 To stocktake and propose efficient DoE strategies.
- 3 To set up a Digital Twin (DT) information management architecture.
- 4 To develop and validate physics-based and data-driven models for simulating and substituting critical physical characterisation experiments.
- 5 To lay down the pathway for results' exploitation and dissemination.



Co-funded by the European Union under grant agreement N° 101103755 and by UKRI under grant agreement No. 10078013, respectively. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor CINEA can be held responsible for them.