Situationally Aware Innovative Battery Management System for Next Generation Vehicles

InnoBMS - Deliverable report

D7.1 - Project Management Plan inc. quality assurance and risk mGMT.

D7.1 - PROJECT MANAGEMENT PLAN INC. QUALITY ASSURANCE AND RISK MGMT.

InnoBMS

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Author(s)	Christophe Rebreyend (UNR)	2024/06/05
Checked by	Arjo Roersch van der Hoogte (UNR)	2024/06/06
Reviewed by	Ashleigh Hruz (VUB)	2024/06/24
Coordinator	Prof. dr. ir. Omar Hegazy (VUB)	2024/06/28

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Project summary

The core objective of InnoBMS is to develop and demonstrate (TRL6) a future-ready best-in-class BMS hard- and software solution that maximizes battery utilization and performance for the user without negatively affecting battery life, even in extreme conditions, whilst continuously maintaining safety. Concretely, the InnoBMS proposal will deliver a 12% higher effective battery pack volumetric density, a 33% longer battery lifetime and a demonstrated lifetime of 15 years. The results will be demonstrated using novel testing methods that give a 36% reduction in the testing time of a BMS. The results will be demonstrated in two use cases, one light commercial vehicle (Fiat Doblo Electric) and one medium-duty van (IVECO eDaily). The key outcomes will enable a cost reduction of 12% and 9.7% for passenger cars and light-duty vehicles, respectively. The core objective will be achieved through five technical objectives. 1) advanced hybrid physical and data-driven models and algorithms to enable a flexible and modular BMS suitable for a wide range of batteries. 2) Software for a fully connected and fully wireless BMS that acts as a communication server inside the vehicle E/E-architecture, the center of connection, on-board diagnostics, and decision-taking for all battery-related information. 3) A scalable, fully wireless, and self-tested BMS hardware that enables using different battery sizes at different operating voltage levels, and smart sensor integration. 4) Better battery utilization and exploitation using cloud-informed strategies and procedure. 5) A heterogeneous simulation toolchain and automated test methods.

Publishable summary

The Project handbook of InnoBMS is based on the Annex I of the Grant agreement, the "Description of Action", the Consortium Agreement and further agreements proposed by the management team and discussed during the Kick-Off Meeting.

It covers the detailed explanation on project governance, meetings, quality assurance, risk management, the work plan, reporting, communication and dissemination rules, and confidentiality. This project handbook is meant as the guide for the project and will therefore be reviewed and updated if deemed required with updated information in an appendix.

The most recent version of the document will be available for the consortium members (via the InnoBMS-archive platform). If a new person joins the InnoBMS consortium, this document will serve as guide for them to get familiar with the project management structure and to know where they can find specific information related to project management procedures.

Acknowledgement

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Project partners:

#	Partner short name	Partner Full Name
1	VUB	Vrije Universiteit Brussel
2	TOFAS	TOFAS Turk Otomobil Fabrikasi Anonim Sirketi
3	BOSCH - RO	Robert Bosch
4	AVL	AVL List GmbH
5	AVL-SFR	AVL Software and Functions Gmbh
6	IDIADA	Idiada Automotive Technology SA
7	CID	Fundacion Cidetec
8	UL	Univerza v Ljubljani
9	THIL	Tajfun Hil Društvo sa Ograničenom Odgovornošću za Istraživanje, Proizvodnju, Rgovinu i Usluge Novi Sad
10	UNR	Uniresearch BV
11	FMF	FPT Motorenforschung AG
12	PTE	Potenza Technology Limited

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