ONLINE PUBLIC DEMONSTRATION

17th November 2020, 10:00-12:00 CET

GHOST

InteGrated and PHysically Optimised Battery System for Plug-in Vehicles Technologies

This session is being recorded

This project has received funding from the European Union's Horizon2020 Programme for research and innovation under grant agreement No.770019.

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Welcome and project targets

Fausto Frigerio

CRF

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Public demo: Agenda

TOPIC	PRESENTER
Welcome & Project targets	**Fausto Frigerio, C.R.F. S.C.p.A**
Basic Unit Concept Overview	Dr. Andreas Könekamp, AVL
Housing Manufacture, Base Unit System Validation at lab level	Dr. Felix Weidmann, Fraunhofer-LBF
Power PCB	Frédéric Meniere, EVE-System
Sensor-less temperature measurement	Dr. Andreas Berger, IFAT
Battery cooling	Rainer Sonnenberger, Roque Salazar-Alvear, Valeo
Assembly of the Basic Unit & electrical tests	Frédéric Meniere, EVE-System
Conclusion & outlook	Dr. Andreas Könekamp, AVL
Questions & answers	

Introduction

Project typology: **Innovation Action**

Call: **H2020-GV06-2017**

Acronym: **GHOST**

Title: **InteGrated and PHysically Optimised Battery System for Plug-in Vehicles Technologies**

Coordinator: **CRF**

Partners (from 6 EU countries): **IVECO**, **Toyota Motor Europe**, **Infineon**, **Valeo**, **EVE System**, **UMICORE**, **AVL (AT & DE)**, **Fraunhofer (IIBS & LBF)**, **Laborelec**, **Ikerlan**, **VUB** (co-coordinator)

Start: **October 2017**

Duration: **42 months**

Overall Budget: **8.87 M€**

EU funding: **7.15 M€**

Introduction

GHOST project (started in October 2017).

Project Typology: **Innovation Action**, Call: **H2020-GV06-2017**

SCOPE: to extend the electrical vehicle diffusion through the improvement of Battery System in terms of:

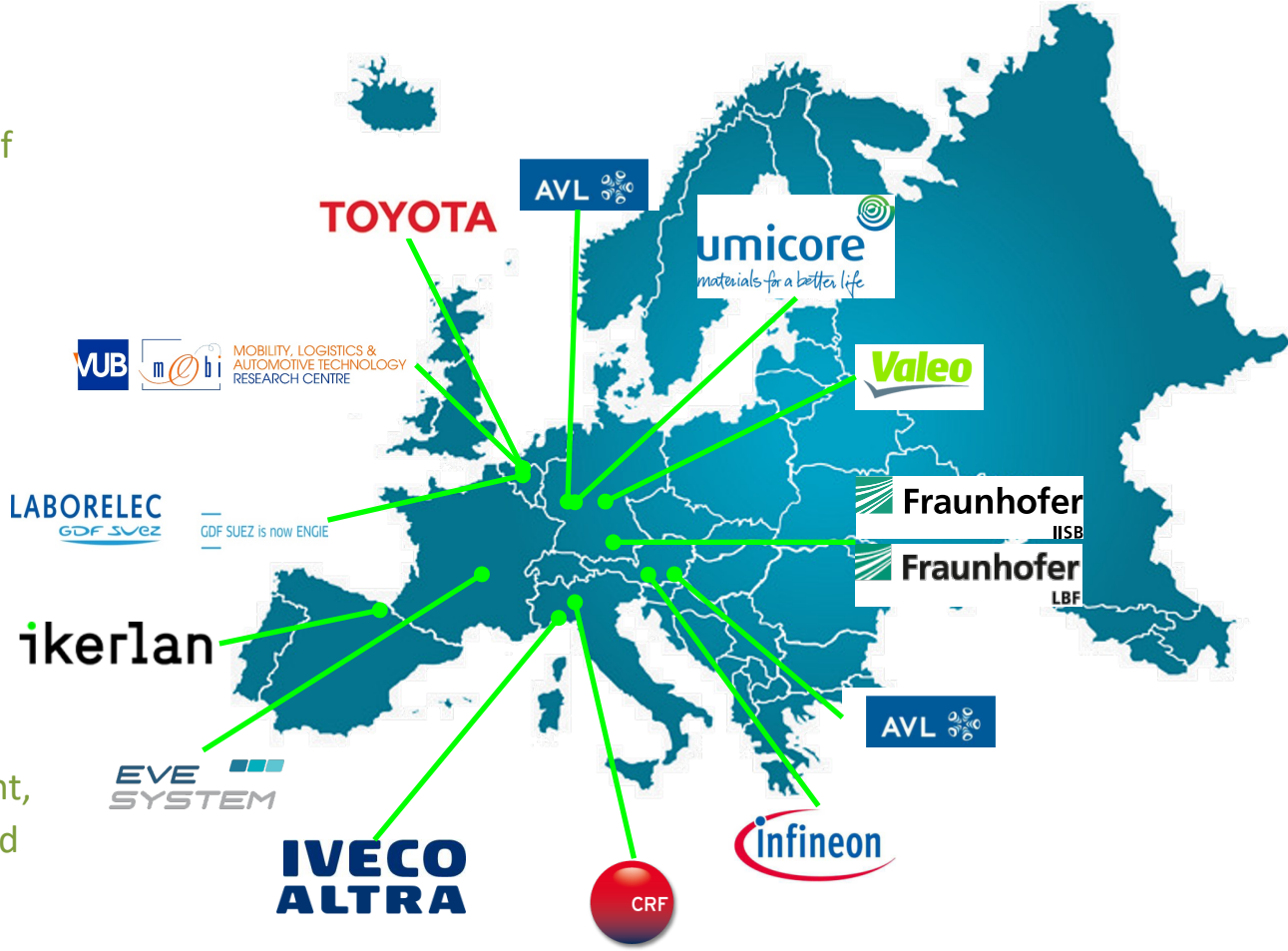
- Range
- Lifetime
- Functional safety
- Reliability

through a complete optimization of the electric, mechanical and thermal architecture, using cells already available on the market.

GHOST Consortium:

Thirteen-members belonging to 6 EU member states

High level competencies in the field of Battery Systems, thermal management, integration and safety for automotive applications, suppliers, engineering and technology organizations and universities.



Objectives of the GHOST project

The commitment made by the Consortium to ensure the achievement of the Scope, is reflected in the declaration of the following Objectives:

- Thermal, electrical and mechanical design of **Battery Systems** aiming at **highly increased energy density by 15-20%**.
- Battery System **architecture** with high degree of **modularity** and compatible with the new **ultra fast charging requirements.**
- Innovative and integrated mass-production design solutions for **manufacturing** (to reduce integration cost at least by 20-30%), **recycling** and **second use.**
- Definition of **new test methodologies** and procedures to evaluate **performances, reliability, safety and lifetime** of different BS.
- Demonstration of GHOST solutions in **two demonstrators** (**BEV** bus with ultra-fast partial charge capability and **P-HEV** car) and one lab demonstrator (module level) for the **post Lithium-Ion technology**.

Three years later, after months of collaborative activities and unfortunately the devastating effects of the spread of COVID-19, where are we got so far? Let's see..

Thank you

Consortium

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