

# PARTNERS

#### Engineering Service Provider / Project Coordinator

IDIADA Automotive Technology S.A.

www.applusidiada.com

#### Vehicle OEMs

Centro Ricerche Fiat S.C.p.A. www.crf.it Fiat Chrysler Automobiles Italy S.p.A. www.fcagroup.com

Toyota Motor Europe www.toyota-europe.com Volvo Car Group www.volvocars.com

#### TIER 1 Suppliers

AGC Glass Europe www.agc-glass.eu
Denso Thermal System S.p.A. www.denso-ts.com
Faurecia Sièges d'Automobile www.faurecia.com
Faurecia Interieur Industrie www.faurecia.com
Hutchinson S.A. www.hutchinson.com
IEE International Electronics & Engineering S.A.
www.iee.lu

### University and Research Institutes

Luxembourg Institute of Science and Technology www.list.lu

Fraunhofer Institute for Structrual Durability and
System Reliability LBF www.lbf.fraunhofer.de
Coventry University www.coventry.ac.uk
Institute for Automotive Engineering, RWTH Aachen
University www.ika.rwth-aachen.de
Fundacion Tecnalia Research and Innovation
www.tecnalia.com

Kompetenzzentrum - Das Virtuelle Fahrzeug, Forschungsgesellschaft m.b.H. www.v2c2.at

## Management Service Supplier

Uniresearch BV www.uniresearch.com



Acronym: DOMUS

Full name: Design OptiMisation for

efficient EVs based on a

**US**er-centric approach

**Duration:** 42 months

Start date: November 2017

Total budget: 9.0 M€ (100% EU Contribution)



This project has received funding from the European Union's Horizon2020 research and innovation programme under Grant Agreement no. 769902.





































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Increasing EV's driving range through user-centric cabin design modifications, innovative solutions for comfort perception, efficient management, and advanced assessment methods.

www.domus-project.eu







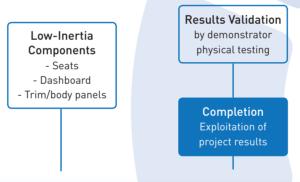
The overall objective of the **DOMUS** project is to reduce the overall energy consumption of future EVs in order to increase the electric range by 25% for different ambient conditions.

This will be achieved by an in depth understanding of comfort perception of EV users before developing reliable methodologies for designing and assessing the full vehicle context from a user-centric perspective, investigating radically new cabin designs and delivering innovative components, systems and control strategies to meet customer expectations.





- DOMUS will develop, integrate and demonstrate new components, systems and control strategies for EVs that are energy efficient, comfortable, safe, configurable and cost effective.
- DOMUS will achieve an increase of 25% of the electric drive range of EVs compared to their 2016 reference models.
- DOMUS will generate knowhow about user's perception of comfort and corresponding cabin requirements for future mass-market oriented efficient EVs.





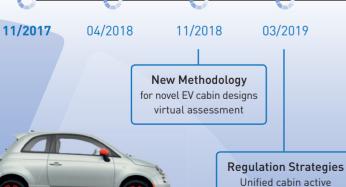
The **DOMUS** project will contribute to a wider adoption of EVs by the general public and accelerated transition towards the production of low and zero emission vehicles, in particular, battery EV and (plug in) hybrid EVs.

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\* The Concept-i represents the vision of Toyota on future EV mobility.

This concept is not directly related to the DOMUS-Project



comfort system

07/2020 09/2020 03/2021

Thermal Insulation
Components
- PCM liner
- Glazing

Cabin Mock-up
Physical demonstrator of energy-efficient EV cabin design

Industralization Steps

~ 2025

Supporting Measures
(Infrastructure, Regulation, Standards)

**New Research Direction**