

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



**DOMUS** Acronym:

Full name: Design OptiMisation for

> efficient EVs based on a **US**er-centric approach

42 months Duration:

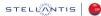
Start date: November 2017

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.





































Project coordinator: Xavier Cort, MSc

IDIADA

xcort@idiada.com

Maarten Weide, MSc Project manager:

Uniresearch B.V.

m.weide@uniresearch.com





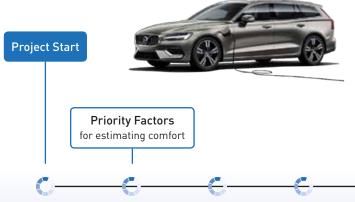
Increasing EV's driving range through user-centric cabin design modifications, innovative solutions for comfort perception, efficient management, and advanced assessment methods.

www.domus-project.eu

# **OBJECTIVES**

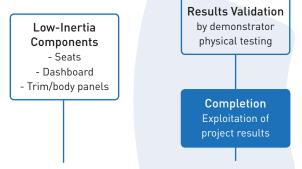
The overall objective of the **DOMUS** project is to reduce the overall energy consumption of future EVs in order to increase the electric range by 25% for different ambient conditions.

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.

www.domus-project.eu



\* The Concept-i represents the vision of Toyota on future EV mobility. This concept is not directly related to the DOMUS-Project

~ 2025





**Industralization Steps** 

Supporting Measures
(Infrastructure, Regulation, Standards)

**New Research Direction**