





INVITATION: Two-Session-Clustering Workshop QUIET & DOMUS

Session 1

Making electric cars more energy efficient

Session 2

Breakthrough technologies at component level

17th February 2021

Online webinar

① 9 am CET

③ 3.25 hours

Online webinar

() 9 am CET

4 hours

Please register for one or both sessions via this link

Electric vehicle user-centric design for optimized energy efficiency



Increasing the range of these vehicles will increase customer acceptance and market penetration of EVs in Europe and around the world in the coming years, and hence contributing to clean mobility.

The both Horizon 2020 projects DOMUS (Design OptiMisation for efficient electric vehicles based on a USer-centric approach, www.domus-project.eu/) and QUIET (QUalifying and Implementing a user-centric designed and EfficienT electric vehicle, www.quiet-project.eu/) aim to optimize energy efficiency and thus to increase the range of electric vehicles via innovative user-centric design. New cabin components, systems and control strategies will be developed and demonstrated in an A and B segment car. Both projects will present their progress and will highlight the similarities and differences in their approach.







Programme

DOMUS and QUIET have one ultimate goal: Increase driving range of electric vehicles by 25 % in order to increase customer acceptance and market penetration of EVs in Europe and around the world in the coming years. In order to achieve such an important objective both projects are developing:

- 1. A virtual user-centric approach to design radically new cabin designs and assess them in terms of optimal energy efficiency use
- 2. Breakthrough technologies at component level (Doors, seats, panels...etc.) that will reduce the weight and energy consumption of the entire electric vehicle
- 3. Thermal management control system to be implemented in a demo car which will maximize energy efficiency while keeping safety and comfort.

Session 1 will discuss and analyze the different methodologies applied by both projects in order to fulfil the same objectives.

Session 2 will discuss breakthrough technologies at component level and discussing with invited speakers from the H2020 projects BIOMOTIVE and FITGEN about alternative solutions at component level related to EVs.

Moderation & session organizers

European Commission



Eric Cerneaz (European Commission – INEA)

Project Officer DOMUS & QUIET | Moderation of Discussions



Maarten Weide (Uniresearch)

Maarten has a Master's degree in Industrial Design Engineering from the Delft University of Technology. Maarten is an experienced project manager with over 10 years' experience in project management. He has managed many European projects, mainly on the topics Energy and NMP (Nanosciences, nanotechnologies, materials and new production technologies).

Project Manager and Dissemination leader of DOMUS

QUIET



Dragan Šimić (AIT)

Senior Scientist & Thematic Coordinator at AIT.

Expert for EV and HEV modelling and simulation (e.g. energy efficiency, thermal management, energy management) and for emobility, HVAC systems and automotive applications.

Project Manager & Coordinator of QUIET.

The research leading to the results has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 769902 (DOMUS) and 769826 (QUIET)







AGENDA | SESSION 1



Clustering Workshop QUIET & DOMUS (Online)

17th February 2021

Meeting organiser	Uniresearch BV	
Type of meeting	Workshop, Session 1	
Meeting Link	MS Teams, link will be provided after registration	

17 th Februar	17 th February 2021			
Timing	Topic	Presenter		
9:00-9:05	Welcome / Introduction to the workshop	Coordinator QUIET & DOMUS		
9:05-9:10	Short introduction of QUIET	Coordinator QUIET		
9:10-9:15	Short introduction of DOMUS	Coordinator DOMUS		
9:15-9:40	A virtual user-centric approach to design radically new cabin designs and assess them in terms of optimal energy efficiency use	DOMUS, Sebastian Moller, Virtual Vehicle, with contribution from James Brusey, Coventry University		
9:40-10:05	A virtual user-centric approach to design radically new cabin designs and assess them in terms of optimal energy efficiency use	QUIET, Steffen Jahn; User Centric Design, Honda R&D Europe (Deutschland) GmbH)		
10:05 -10:30	Discussion	Moderated by Eric Cerneaz, EC Project Officer		
10.30-10.45	Break			
10:45-11:10	Thermal management control system to be implemented in a demo car which will maximize energy efficiency while keeping safety and comfort.	DOMUS, Joaquim Quitart, Thermal management control system, IDIADA; Domenico Vitali, HVAC and HMI, DNTS		

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17 th February 2021		
11:10-11:45	Thermal management control system to be implemented in a demo car which will maximize energy efficiency while keeping safety and comfort.	QUIET, Bernd Thieringer; HVAC system, AVL Thermal and HVAC GmbH
11:45-12:10	Discussion	Moderated by Eric Cerneaz, EC Project Officer
12:10-12:15	Closure	Coordinator DOMUS & QUIET







AGENDA | SESSION 2



(Online) Clustering Workshop QUIET & DOMUS: Breakthrough technologies at component level

3rd March 2021

Meeting organiser	Uniresearch BV	
Type of meeting	Workshop, Session 2	
Meeting link	MS Teams, link will be provided after registration	

3rd March 2021		
Timing	Topic	Presenter
9:00-9:05	Welcome / Introduction to the workshop	Coordinator QUIET & DOMUS
9:05-9:10	Short introduction of QUIET	Coordinator QUIET
9:10-9:15	Short introduction of DOMUS	Coordinator DOMUS
9:15-9:25	Seats that will reduce the weight and energy consumption of the entire electric vehicle	QUIET, Jürgen Roither, AIT
9:25-9:35	Seats that will reduce the weight and energy consumption of the entire electric vehicle	DOMUS, Ekrem Kececi, Faurecia Seats
9:35-9:45	Discussion	Mod. by Eric Cerneaz, EC Project Officer
9:45-9:55	Thermal insulation solutions / body panels (including PCMs)	DOMUS, Helder-Filipe De Campos Garcia / Cédric Huillet, Hutchinson
9:55-10:05	Advanced thermal storages based on phase change materials (PCM) with high power output using open porous aluminum foams	QUIET, Esther Kieseritzky, Rubitherm







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Discussion	Mod. by Eric Cerneaz, EC Project Officer
Powerfilms for infrared radiative heating	QUIET, Daniel Habenbacher, ATT
Interior radiant panels	DOMUS, Michael Olk, IEE
Discussion	Mod. by Eric Cerneaz, EC Project Officer
Break	
Lightweight materials with composites and novel hybrid foam materials to reduce the weight of EV closure elements/doors while improving their thermal properties	QUIET, Tamás Turcsán ECON
Dashboard weight reduction	DOMUS, Faurecia Interior
Discussion	Mod. by Eric Cerneaz, EC Project Officer
Lightweight thermoplastic glazing techniques for windows	QUIET, Hansjörg Kapeller, AIT
Glazing insulation / solution + - Permanent anti- fog windshield coating for enhanced driver vision	DOMUS, Rolf Gervelmeyer, AGC + Jean Di Martino, LIST
Discussion	Mod. by Eric Cerneaz, EC Project Officer
BIOMOTIVE: development of biobased automotive interior parts with enhanced technical performance, improved environmental profile and economic competitiveness	BIOMOTIVE
The H2020 project FITGEN: towards delivering a functionally integrated e-axle ready for mass market third generation electric vehicles.	EXTERNAL SPEAKER, Michele De Gennaro, (AIT)
Discussion	Mod. by Eric Cerneaz, EC Project Officer
Closure	Coordinator DOMUS & QUIET
	Powerfilms for infrared radiative heating Interior radiant panels Discussion Break Lightweight materials with composites and novel hybrid foam materials to reduce the weight of EV closure elements/doors while improving their thermal properties Dashboard weight reduction Discussion Lightweight thermoplastic glazing techniques for windows Glazing insulation / solution + - Permanent antifog windshield coating for enhanced driver vision Discussion BIOMOTIVE: development of biobased automotive interior parts with enhanced technical performance, improved environmental profile and economic competitiveness The H2020 project FITGEN: towards delivering a functionally integrated e-axle ready for mass market third generation electric vehicles. Discussion