

Welcome to the interACT Virtual Final Event!

We are very excited to be presenting the results of our project.



Time	Topic
Opening session	
13:00-13:10	Welcome <i>Mrs. Anna Schieben, Coordinator of interACT Project, DLR e.V., Germany</i>
13:10-13:20	“interACT – the vision of automated vehicles in mixed traffic” <i>Mrs. Anna Schieben, Coordinator of interACT Project, DLR e.V., Germany</i>

13:20-14:50	
The basis for the interACT developments:	
Defining scenarios, observing real traffic & programming the vehicle automation	
<i>Moderators: Mrs. Anna Schieben, DLR e.V. Germany Mrs. Natasha Merat, ITS Leeds, UK</i>	
13:20-13:40	“The interACT scenarios – defining and documenting essential urban scenarios for the development and evaluation of interACT solutions” <i>Mr. Marc Wilbrink, Senior researcher, DLR e.V., Germany</i>
13:40-13:50	Q&As
13:50-14:10	“Observing human interaction in real traffic – what we learned for interACT” <i>Mr. André Dietrich, Senior researcher, Technical University Munich, Germany</i>
14:10-14:20	Q&As
14:20-14:40	“From situation awareness to cooperation and communication planning of automated vehicles for their safer integration in mixed traffic: a modular approach” <i>Giorgos Drainakis, Senior Researcher, ICCS, Greece</i>
14:40-14:50	Q&As
Closing session	
14:50-15:00	Wrap up of Day I and preview of Day II <i>Mrs. Anna Schieben, DLR e.V. Germany Mrs. Natasha Merat, ITS Leeds, UK</i>



Time	Topic
Opening session	
13:00-13:05	Welcome <i>Mrs. Anna Schieben, Coordinator of interACT Project, DLR e.V., Germany</i>
13:05-13:15	“interACT – the vision of automated vehicles in mixed traffic” (Summary of Day I) <i>Mrs. Anna Schieben, Coordinator of interACT Project, DLR e.V., Germany</i>
13:15-13:35	Keynote <i>Mr. Tom Alkim, Policy Officer Connected & Automated driving at the European Commission, Directorate General Research & Innovation</i>



13:35-15:40	
<i>The implementation and evaluation of the interACT research: Developing the Human-Machine interaction, implementing the demonstrator vehicles and evaluating the interACT solutions</i>	
<i>Moderators: Mrs. Anna Schieben, DLR e.V. Germany Mrs. Natasha Merat, ITS Leeds, UK</i>	
13:35-14:05	“Developing interaction strategies and novel HMI concepts” <i>Mr. Marc Kaup, HELLA, Germany Mr. Florian Weber, BMW, Germany</i>
14:05 –14:15	Q&As
14:15-14:35	“Integration and technical Testing of the interACT demonstrator vehicles ” <i>Dr. Fabio Tango, CRF, Italy</i>
14:35-14:45	Q&As
14:45-15:20	“Testing the interACT solutions: Methodologies and results for evaluation and impact assessment <i>Dr. Yee Mun Lee, ITS Leeds, UK</i>
15:20-15:30	Q&As
Closing session	
15:30-15:40	Wrap up of Day II and Conclusions of the project <i>Mrs. Anna Schieben, Coordinator of interACT Project, DLR e.V., Germany</i>

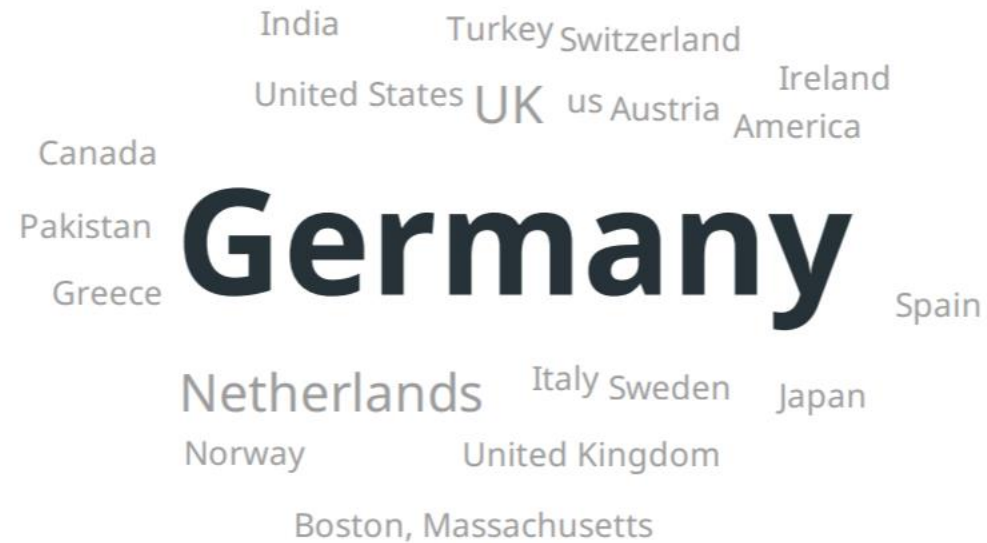
Hello and Welcome to the interACT event! Please answer the following question: What type of organisation do you represent (e.g. Research/Industry/Government etc.)

076



Which country are you calling from?

085



What is your main field of expertise? (human factors, design, sales, sensors, etc.)

078

Computer Science in VR
 Evaluation & Validation
 Humanising autonomy
 Control System
 motion planning
 Neurocognitive psychology
 R&D
 automated vehicles
 economics
 societal
 lighting
 HMI
 Traffic safety
 Cognitive Science

Human Factors

data science
 policy
 psychology
 Simulation
 vehicle lighting
 Software
 Mobile communication
 Transportation Safety
 V2X Communication
 Systems Engineering
 Computer Vision and ML
 Human Factors/design





Virtual Final Event

interACT – the vision of automated vehicles in mixed traffic Project overview

Anna Schieben

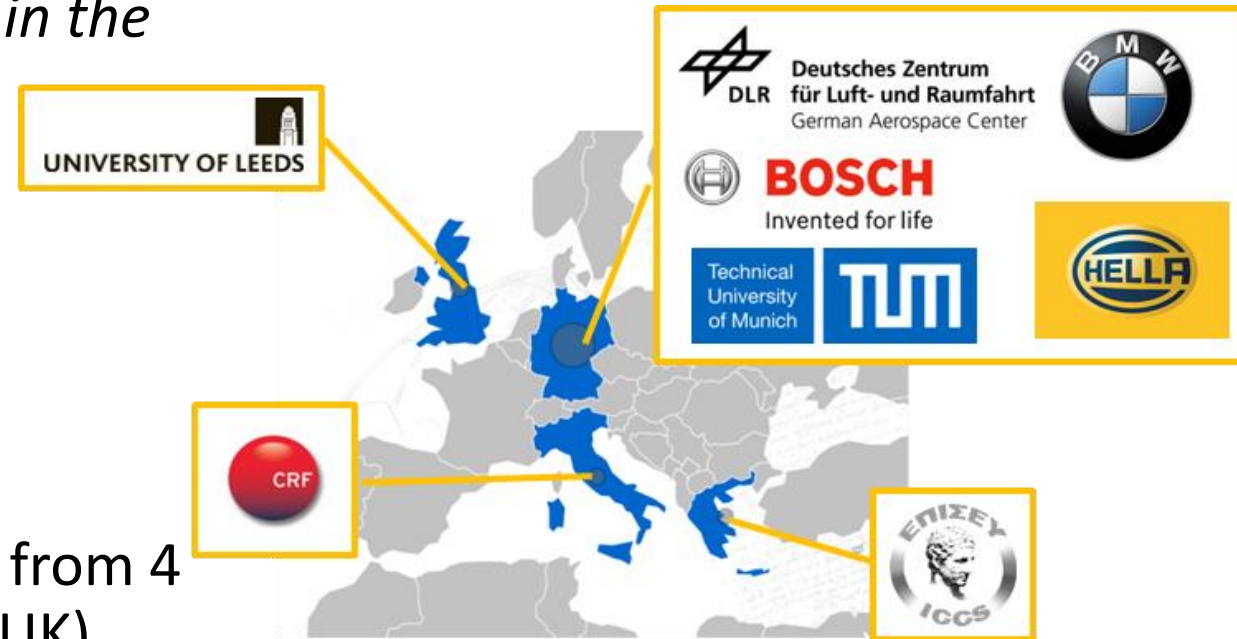
DLR e.V.

18 June 2020



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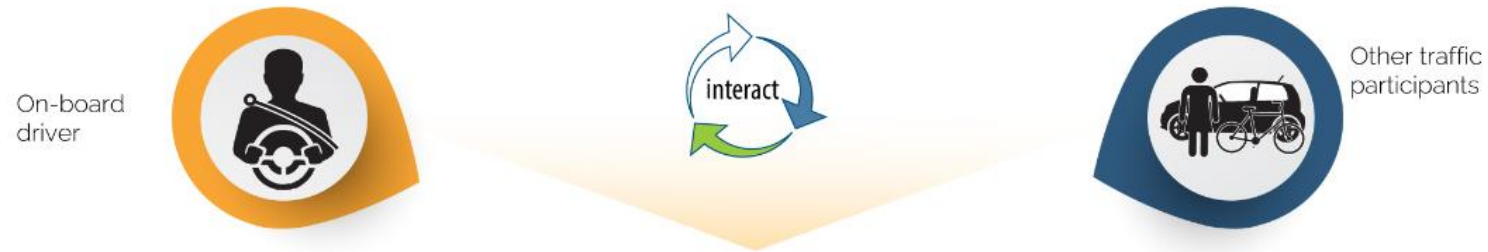
- **Programme:** EU/H2020-ART04 - *Safety and end-user acceptance aspects of road automation in the transition period*
- **Duration:** 36 months
- **Period:** May 2017 – April 2020 (Sept. 2020)
- **EU Funding:** 5.527.581 €
- **Coordinator:** Anna Schieben, DLR
- **Partners:** 8 industrial and academic partners from 4 European countries (Germany, Italy, Greece, UK)
- **US - EU twinning project:** AVIntent (NHTSA)



Integrating automated vehicles in mixed traffic

www.interact-roadautomation.eu

Situation Today



Future situation: Automated vehicles in mixed traffic environments



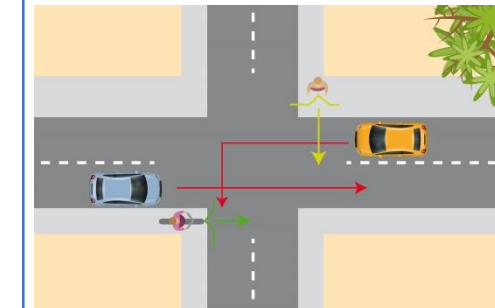
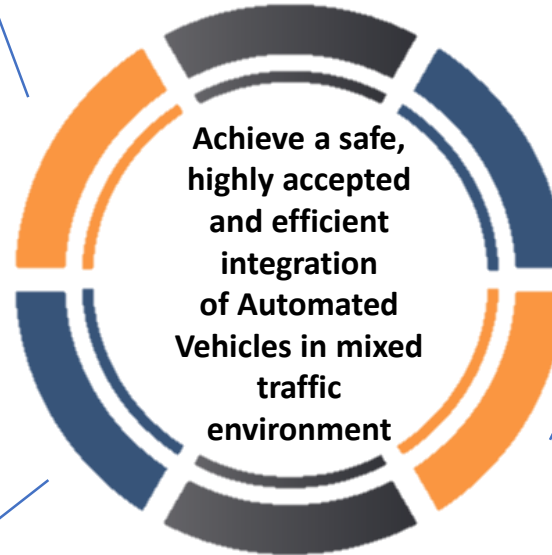
The interACT project addressed the following challenges:

- Safe integration of AVs (SAE level 3 and above) into complex, mixed traffic environments
- Solutions for expectation-conforming interaction of Automated Vehicles (AV) with other road users and on-board users
- Increase in user acceptance and ease-of use by appropriate AV design
- Increase the overall safety and reliability of AVs in mixed traffic environments

The challenge



1st Objective Psychological models



2nd Objective Intention recognition & behavioural predictions

3rd Objective CCPU & safety layer



4th Objective Novel HMI elements



5th Objective Methodology for assessing the quality of interaction



5th Objective
Methodology for assessing
the quality of interaction

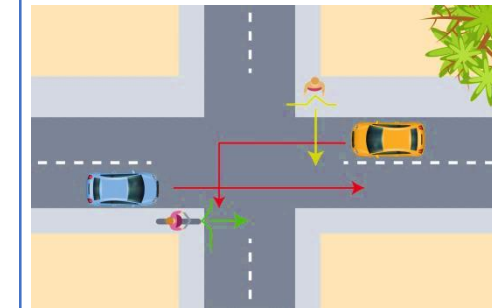


The challenge

1st Objective
Psychological models



4th Objective
Novel HMI
elements



2nd Objective
Intention recognition &
behavioural predictions

3rd Objective
CCPU & safety layer



1st Objective
Psychological models

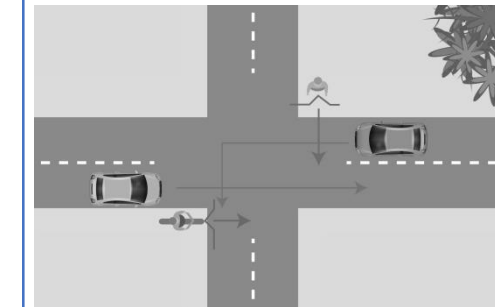


The challenge



5th Objective

Methodology for assessing
the quality of interaction



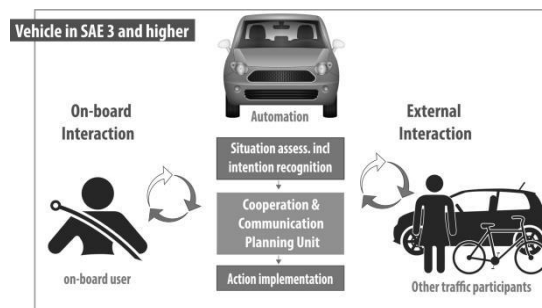
2nd Objective
Intention recognition &
behavioural predictions

4th Objective

Novel HMI
elements



3rd Objective
CCPU & safety layer





We hope you enjoy the meeting!

www.interact-roadautomation.eu

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