



Measures for Behaving Safely in Traffic

press release February 8th, 2018

Starting Point for Measurement Activities for Improving Traffic Safety within the EU Project MeBeSafe in Eindhoven

The Horizon 2020 EU project MeBeSafe (Measures for Behaving Safely in Traffic) has successfully started its first baseline measurements within the project in Eindhoven, The Netherlands. The measurements at an Eindhoven motorway exit tracks the current driving behaviour of drivers at this location to build the basis for further research for improving traffic safety by the concept of nudging. The measurements at a busy intersection in the city centre are used to study the variation in cyclist flows and directions during a full week 24/7.

In the work package "Infrastructure Measures" within the MeBeSafe project, RWTH Aachen University with the Institute for Automotive Engineering (ika) and the Institute of Highway Engineering (ISAC), BMW Group and Heijmans aim to nudge car drivers to behave safer in traffic. Safer behaviour is addressed by driving at a safe speed and trajectory via nudging solutions implemented in the infrastructure. This allows to target every driver that shows potentially unsafe behaviour and does not limit actions to drivers that have the latest advanced driver assistance systems (ADAS) in their cars.

A motorway exit in Eindhoven, The Netherlands, will serve as one research road section for nudging drivers towards a desired behaviour. As a first step in researching appropriate infrastructure nudging measures, the current traffic flow was initially measured during the second week in January 2018. The results serve as a first indicator for simulator testing of potential infrastructure nudging solutions that are foreseen to be tested later this year in a driving simulator and



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virtual traffic modelling. In 2019, the research will continue with preparations for a field test of real-life infrastructure nudging measures at the same location of the baseline measurement to validate the simulator and traffic model results.

The work package "In-vehicle Measures" focuses at nudging drivers of passenger cars to drive slower and to be mentally better prepared to act in limited visibility intersections where they may cross the path of vulnerable road users, specifically cyclists. TNO and Cygnify performed measurements at an unsignalized intersection in the centre of Eindhoven to determine the variations in cyclist and vehicle flows during a full week 24/7. Analysis results are used to improve the decision logic in vehicles so that drivers are informed in an early stage about the possibility to find a cyclist on the vehicle's path, even if the cyclist is not yet within the view of the vehicle's sensor system. In this part of the project, different in-vehicle nudging solutions will be developed, of which the most promising will be implemented in a vehicle to be validated in a field test in 2019.

About MeBeSafe:

MeBeSafe granted by the European Commission and coordinated by the Institute for Automotive Engineering (ika) of RWTH Aachen University is a research and innovation programme within Horizon 2020 RIA from the EU. The project started on the 1st of May 2017 and will run for 42 months. The project has a strong focus on human factors in transportation to tackle "human errors" as one of the main causes for accidents in road transportation. MeBeSafe aims at changing habitual traffic behaviour directly by using the concept of nudging.



This project (MeBeSafe) has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 723430.



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The consortium comprises of a total of 15 partners including automotive OEMs and suppliers, road infrastructure and fleet owners, SMEs and leading organizations in traffic safety research and modelling.

- Institute for Automotive Engineering (ika) of RWTH Aachen University, Germany
- Institute of Highway Engineering (ISAC) of RWTH Aachen University, Germany
- SAFER – Vehicle and Traffic Safety Centre at Chalmers University, Sweden
- Volvo Car Corporation, Sweden
- TNO – Netherlands Organisation for Applied Scientific Research, The Netherlands
- Shell International BV, The Netherlands
- Heijmans Wegen BV, The Netherlands
- Institute for Road Safety Research (SWOV), The Netherlands
- University of Firenze, Italy
- Fiat Chrysler Automobiles, Italy
- Cranfield University, United Kingdom
- Cygnify BV, The Netherlands
- Institute for Traffic Accident Research (VUFO) at Dresden University of Technology, Germany
- BMW Group, Germany
- OFFIS e.V., Germany
- Virtual Vehicle Research Center, Austria

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