

EU research project CoEXist: Transport modelling software ready for automated vehicles

Multidisciplinary project team presents the first milestone

Karlsruhe, 24 January 2019. How will automated and conventional vehicles interact in the transition period to fully automated vehicle fleets? How can this coexistence be managed and how will future transport models look like? The European research project CoEXist, in which the PTV Group is also involved, is dealing with those questions. After 18 months of work, the multidisciplinary team of 15 project partners has now reported its first major success: The transport modelling software is “automated vehicle-ready”.

Thus, one of the main objectives of the three-year project, funded by the Horizon 2020 framework program of the European Commission, has been achieved. The PTV research team worked closely with partners from Renault, the French institute Vedecom, TASS International and the University of Stuttgart, supported by the Swedish National Road and Transport Research Institute, the city of Helmond in the Netherlands and the University of Florence, Italy. Thanks to this cooperation, simulations were run, enabled by the connection of the control logic of autonomous vehicles from Vedecom, the TASS International software PreScan and the microscopic simulation software PTV Vissim.

Also, field data were collected on the test track in the city of Helmond were TASS International organised a three-day data collection session in a real traffic environment. Furthermore, the data and the car-following behaviour of automated vehicles (AV) were analysed. Based on these results, new features were released in the PTV simulation software and the recommended values were published. Additionally, the results were used by the University of Stuttgart to develop macroscopic modelling scripts.

“CoEXist is an outstanding research project focussing on an important future topic”, says Prof. Dr. Christoph Walther, Head of Global Research at PTV Group. “With this important milestone, we have paved the way to AV-modelling.”

Now that the modelling software is AV-ready, the four cities involved in CoEXist will model use cases using the microscopic simulation software PTV Vissim and the macroscopic modelling software PTV Visum. In the next steps the CoEXist team will tackle the

automation-readiness of road infrastructure and authorities to get ready for the transition towards a shared road network. More information: www.h2020-coexist.eu.

362 words. Author's copy kindly requested.

Imagery



The CoEXist Project Team came together at the end of 2018 at the PTV Group headquarters.



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To download image material and texts please go to <http://newsroom.ptvgroup.com/en/>

Background information CoEXist

The research project CoEXist focuses on the interaction between semi-automated and conventional vehicles in the transition period to fully autonomous vehicle fleets. It is funded under the Horizon 2020 framework program of the European Commission with a budget of almost 3.5 million euros.

Project duration: May 2017 – April 2020

Project partners: City of Gothenburg, Sweden; City of Stuttgart, Germany; City of Milton Keynes, England; City of Helmond, Netherlands; Rupprecht Consult, Germany; Swedish National Road and Transport Research Institut (vti); Polis, Belgium, Univeristà Firenze, Italy; Stuttgart University, Germany; FEHRL, Belgium; Tass international, Belgium, Vedecom, France, Group Renault, France; iD4Car, Germany; PTV Group, Germany

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