

Joint Workshop on Cooperative Intelligent Transport Systems: Towards High-Level Automated Driving

Date: Mondy, 16 December 2019

Time: 13:30 – 17:30

Location: Rakennustalo RN201 auditorium, Hervanta campus

Tampere University

33720 Tampere, Finland

www.tuni.fi/en/about-us/tampere-university/campuses/hervanta-campus

Description

Around fifteen years ago, the development of cooperative systems started. Short-range communication would provide connectivity between neighbouring vehicles to exchange information, both of their own position and velocity, and of information observed by vehicle sensors, e.g. concerning obstacles on the road or road surface conditions. The idea was that this would enable a whole range of new safety and driver comfort applications. Also other road users, especially vulnerable road users such as pedestrians and cyclists, could participate in such connectivity, now that smartphones had become widespread. Deployment of cooperative systems has been less rapid than of autonomous systems, partly due to the higher level of complexity of the technology. Also, these systems are less known by the general public. But certainly they are a prelude (and an indispensable component) of an even more advanced technology, which has come to rapid development in recent years, and is receiving widespread attention, also from the general public: automated driving. In view of its complexity, several levels of vehicle automation are distinguished, from no automation at all to high-level and full automation.

Careful selection of eventual technologies and business models will substantially influence the further development towards connected, cooperative and automated road transport, and determine its success. Appropriate cooperation between authorities, industry and academia in countries worldwide is a must for the successful implementation of high-level automated road transport, with harmonisation and interoperability as key determinants.

This workshop targets the following topics: global initiatives on C-ITS deployment, legal frameworks, infrastructure for automated driving, and 5G for road safety services. Main goals of the workshop are: to share the state of the art in R&D and deployment of C-ITS; to identify challenges and solutions; and to encourage inter-disciplinary cooperation.

Programme

Moderator: Meng Lu, Dynniq

13:00 – 13:30 Registration (light lunch / coffee / tea)

13:30 – 14:00 Opening / Keynotes, by Marko Forsblom (ITS Finland) & Mika Kulmala (ITS Factory)

14:00 – 14:15 Deployment of C-ITS: a review of global initiatives, by Martin Böhm, AustriaTech, Austria

14:15 – 14:30 Legal frameworks and strategies of regulatory authorities, by Juhani Jääskeläinen, MH Roine Consulting, Finland; Former Head of Unit, European Commission Directorate-General Information Society, Unit G4, ICT for Transport

14:30 – 14:45 Impact assessment of cooperative and automated vehicles, by Luca Studer, Polytechnic University of Milan, Italy

14:15 – 15:00 5G for road safety services, by Tiia Ojanperä, VTT, Finland

15:00 – 15:30 Break (coffee/tea)

15:30 – 16:00 Data-driven transportation management, by Jyrki Nummenmaa, Tampere University, Finland

16:00 – 16:15 Infrastructure requirements of highly automated vehicles - results from MANTRA, by Risto Kulmala, Traficon Oy, Finland

16:15 – 16:30 Automated driving and traffic management, by Seppo Pakarinen, Siemens, Finland

16:30 – 16:45 C-ITS and autonomous driving - some perspectives from transport planning agency, by Tomi Laine, Ramboll, Finland

16:45 – 17:00 Connected and autonomous vehicles, by George Economides Oxfordshire County Council, UK

17:00 – 17:15 ICT infrastructure for automated driving, by Meng Lu, Dynniq, The Netherlands

17:15 – 17:30 Discussions & closing

18:30 Partners Dinner

Registration

Please contact Meng Lu <Meng.Lu@dynniq.com> by Friday 29 November 2019 to register.

Co-organisers and related initiative and projects



ITS Finland ITS Factory



C-MOBILE



AutoMate
Automation as accepted
and trusted TeamMate
to enhance traffic safety
and efficiency



MANTRA

responds to the questions of
CEDR Automation Call
2017: How will automation
change the core business of
NRA's?

