

Workshop title

Cooperative and Automated Driving

Workshop proposer(s)

Meng Lu*

Abstract

The fifth Workshop and Industry Panel on "Cooperative and Automated Driving" will be held on September 20, 2020 in Rhodes, Greece, in conjunction with the IEEE ITSC 2020, one of the major annual conferences of the IEEE Intelligent Transportation Systems Society (ITSS). The Workshop targets connected, cooperative and autonomous technologies for Cooperative ITS and automated driving. Similar to the past, the workshop also features an Industry Panel with experts from related industries, which will again foster the interactive exchange of academia and industry. Recent developments in telecommunications, sensor, information processing and control technologies have enabled substantial progress in the domain of ITS. C-ITS is in a very early stage of deployment, as it is technologically achievable, but the deployment requires cooperation of multiple stakeholders. Automated driving is on the horizon, and will still need substantial and longer-term development and testing to make even the high automation levels a reality in complex situations, such as in urban environments, and in a transit period of only partial market penetration. Cooperative and automated transport are certainly complementary. They are expected to bring substantial benefits in terms of safety, comfort and (traffic and fuel) efficiency. Many challenges exist in this important domain. The workshop targets the challenges for (C-)ITS applications, especially connected and cooperative systems towards automated driving. Competing communication technologies (e.g. peer to peer (IEEE 802.11p), and cellular networks), sensor, information processing and control technologies will be highlighted. The impacts of C-ITS applications will be analysed. Requirements for strong cooperation between industry, authorities and academia in different regions will be addressed. The workshop is expected to be very interactive. Participants will have an excellent opportunity to discuss with and to challenge distinguished speakers and panellists. The technical areas to be discussed include, but are not limited to the following:

- Connected and Automated Vehicles
- V2X communications
- C-ITS deployment and evaluation
- Standardisation
- 5G research and testing

Keywords

- Cooperative Techniques and Systems
- Driver Assistance Systems
- Communications and Protocols in ITS



The 23rd IEEE International Conference on
Intelligent Transportation Systems



Topics of interest

- Connected and Automated Vehicles
- V2X communications
- C-ITS deployment
- Standardisation
- 5G research and testing
- Connected and cooperative systems
- Impacts evaluation of connected, cooperative and automated transport