Call for Papers

5G FOR CONNECTED AND AUTOMATED MOBILITY (CAM) SYMPOSIUM

SYMPOSIUM CO-CHAIRS

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SCOPE AND MOTIVATION

In Europe, in the context of the 5G Action Plan, the mobility vertical, spanning road, rail, water ways and coastal maritime, including a multi-modality component, has been identified as a major driver of the Digital Single Market, and of the Green Deal. Considerable effort and funding has been put into large-scale testing and validation, and even pre-deployment, of 5G, namely in cross-border segments of Trans-European Transport Corridors. Elsewhere in the world, similar focus and effort has been put into addressing smarter mobility.

The main societal objectives of Connected and Automated Mobility (CAM), including Connected and Automated Vehicles (CAV), are Safer Rides (enhanced road safety), More Efficient Rides (lower emissions and reduced congestion) and Connected Rides (infotainment). On the other hand, the potential impact of CAM on jobs and growth, as well as on global competitiveness, both in the transport/mobility sector and across the economy, is huge. To deliver on these promises, we need to build on a complete ecosystem around infrastructure, equipment and services on top of 5G advanced connectivity, whilst mutualizing the huge investments in mobile and fixed broadband.

This first IEEE FNWF 5G for CAM conference will bring together researchers, implementers and planners in the area of CAM, to share their experiences and present results with a view towards large-scale deployment.
TOPICS OF INTEREST

We invite submissions on a wide range of topics, from theoretical and systems research to prototyping to testing and validation to deployment, spanning automotive, rail and Inland waterways and coastal maritime, related but not restricted to:

Technological Issues
- 3GPP releases and equipment timelines
- Components and chipsets
- Antennas
- In-vehicle networking
- Synchronization and Alignment of Networks
- Service Continuity
- Characterization of CAM and other traffic
- Enhanced localization
- MEC interoperability and availability
- 5G connectivity for (extending) ITS instrumentation
- IP Routing and Multi-homing
- Private Networks

Advanced Applications and Services
- Different Classes of Services
- Impact of/on legacy systems

Economic Factors
- Cooperative Business Models
- Neutral Hosts
- Exploiting Right-of-way
- Cost of connectivity, including sharing aspects
- User (co-)ownership
- Pricing of CAM services

Legal and Regulatory
- 5G Coverage Conditions
- Spectrum availability, including experimental licences
- GDPR
- Access to Data
- Data Ownership

Security and Privacy
- Autonomous vehicle security, including the contribution of AI
- Privacy-enhancing Technologies

Availability and Reliability

Liability

Deployment issues
- Rural / Low-population density areas
- Cross-border corridors
- Evolutionary deployments; medium- to long-term plans
- Scalability issues

Financing issues
- Infrastructure investments (road/rail, vehicles, and broadband, including backbone)
- Coordination and Co-investment
- Institutional facilitation

TPC MEMBERS
Nancy Alonistioti, NK University of Athens, EL (Chair)
Jasone Astorga, Universidad del País Vasco/Euskal Herriko Unibertsitatea, ES
Sujit Dey, UC San Diego, CA, USA
Javier Gozalvez, Universidad Miguel Hernández de Elche/Universitat Miguel Hernández d’Elx, ES
Pedro José Marrón, Universität Duisburg-Essen and Fraunhofer IAIS & LocosLab, DE
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Chiara Petrioli, Università di Roma ‘La Sapienza’ & WSense, IT
George Polyzos, Athens University of Economics and Business, EL
Susana Sargento, Universidade de Aveiro & Veniam, PT
Ivan Seskar, Rutgers University, NJ, USA
Elvino Sousa, University of Toronto, Ontario, Canada
Ralf Tönjes, HS Osnabrück, DE

IMPORTANT DATES
Paper Submission: **15 June (Extended)**
Notification: 30 July 2022
Camera Ready and Registration: 30 August 2022

HOW TO SUBMIT A PAPER
All papers for technical symposia should be submitted via [EDAS](https://fnwf.ieee.org/).

Full instructions on how to submit papers are provided on the IEEE FNWF 2022: [https://fnwf.ieee.org/](https://fnwf.ieee.org/)