

IEEE EUROCON 2017 17th IEEE International Conference on Smart Technologies 6 – 8 July 2017 Ohrid, Republic of Macedonia http://eurocon2017.org/Home/SpecialSessions

> Call for Paper (CfP) Special Session SS–5:

"Applications, Demands and Requirements of Future Wireless Vehicular Communication"

Important Date: Full paper submission 31 December 2016

Outline: Transportation systems begin to receive widespread attention from scientific community and emerged towards Intelligent Transportation Systems (ITSs) as the dependence on road transport in our daily lives has grown massively in recent years. The current systems and practices heavily rely on the existing technologies for vehicular communications such as IEEE 802.11p, European Telecommunications Standards Institute (ETSI) ITS-G5. Both these standards rely on IEEE 802.11p, from the IEEE 802.11 family of Wi-Fi standards, for the implementation of physical (PHY) and medium access control (MAC) layers. Some of these enabling technologies have already entered in their mature phase, e.g., ITS-G5, traffic flow sensors and IEEE 802.11p, there is still the need of solutions that can cope up the future requirements of vehicular communications both for safety and infotainment applications. These safety, efficiency and comfort ITS applications exhibit tight latency and throughput demands and requirements. In addition to the efforts that are focused on the WiFi-based solutions to meet the functional requirements associated with higher performance, the next generation of cellular networks (5G) research is underway to consider the vehicular communications. Besides meeting the conventional application domain more advance and challenging applications and use-cases are underway to be considered such as automated driving, cooperative maneuvering etc. Therefore, the future vehicular technologies should target the demands for an in throughput, higher reliability and shorter latency, combined with support for a massive number of vehicles.

Original, high quality contributions that are not yet published, submitted or not currently under review by other peer-reviewed conferences are sought.

Topics of interest include, but are not limited to, the following scope:

- 5G technologies for Vehicular communications
- Future Vehicular networking architectures and system design
- V2V, V2I and V2X communications and networking protocols
- Security dependability in vehicular networks
- Future QoS requirements and management for vehicular networks
- Advance Medium Access for Vehicular communication
- Advances in In-vehicle communications
- LTE-A and Heterogeneous networking approaches for future vehicular connectivity

- Automatic incident detection and recovery
- New paradigms for smart mobility
- M2M communication in the scope of ITS
- Public transport prioritization
- Vehicular communications Prototype development and measurements
- Dynamic prediction of traffic flows
- Data distribution platforms
- Safety aspects of smart mobility
- V2V and vehicular sensors communications
- Advanced Driver assistance systems and services
- Simulation and performance evaluation techniques for vehicular networks
- Field trials/Testbed implementations of vehicular communications

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Types of papers:

- research papers (academic or industrial)
- student research papers (the first author must be a MSc or PhD student at the time of initial paper submission)
- professional papers and presentations

Paper Submission: In order to upload the pdf version of your paper please visit

<u>https://easychair.org/conferences/?conf=ieeeeurocon2017</u> The working language of the conference is English. The research contributions must be original, have neither been nor are intended to be published elsewhere during the review period. Papers should strictly follow IEEE format and be limited to 6 pages. All submissions will be refereed by experts in the field. The quality of the research papers will be assessed based on its originality, significance and clarity. Authors should indicate their preference in oral or poster presentation (the chairs, based on the reviewer's recommendations, can change the presentation type). Only presented research papers (academic, industrial and student) satisfying all IEEE standards will be submitted to the **IEEEXplore** database (indexed by Inspec, Ei Compendex, Scopus, Web of Science and Google Scholar) and are eligible for further submission to IEEE journals. **IEEE EUROCON 2017 Student Paper Competition:** The student papers are research contributions where the first author must be a MSc or PhD student at the time of initial paper submission. These paper submissions are automatically entering the Student Paper Competition. The EUROCON 2017 Best Student Paper Award is a tablet computer.

For more information please visit the conference web page: <u>http://eurocon2017.org/Home/PaperSubmission</u>