2016 IEEE Intelligent Vehicles Symposium
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CALL FOR PAPERS: Workshop on Cooperative Communication and Positioning (CCP)

Organizing Committee

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Topics of interest include, but are not limited to:

- Key positioning requirements (latency, reliability) of future smart connected cars applications (autonomous driving, platooning, vulnerable road users)
- Enhanced ranging capabilities of new wave forms for vehicular communications
- Dependable communication technologies (e.g. ITS-G5/IEEE 802.11- 2012 OCB, LTE-ProSe, WiFi-Direct, Bluetooth/zigbee)
- Cooperative radiolocation algorithms
- Protocol extensions for dedicated V2V, V2I and V2IoT (Vehicle-to-Internet-of-Things) communications
- Distributed security and privacy mechanisms
- High-Precision Mapping, Predictive Caching & Semantics
- System & Component level simulation concepts
- Conformance tests for positioning service
- Performance bounds and optimization
- Field tests of vehicular communications

Workshop Description

Wireless vehicular communication systems constitute the backbone of future intelligent transportations systems (ITS). Currently, wireless communications informs the human driver. In the future, wireless communications will influence the movement of vehicles or allow the detection of vulnerable road users (VRU), including providing critical information required by networked automated road transports. Future ITS that network automated vehicles with the goal of zero accidents have the potential to save more than 1 Mio. human lives and avoid 8 Mio. serious injuries worldwide every year.

Such future ITS applications yet rely on knowledge of the geographical positions of vehicles. Unfortunately, satellite-based positioning systems (e.g., GPS and Galileo) are unable to provide sufficiently accurate position information for many important applications and in certain challenging but common environments (e.g., urban canyons and tunnels).

Such short coming is expected to be compensated by combining traditional satellite systems with an innovative use of on-board sensing and infrastructure-based cooperative wireless communication technologies (e.g., Wi-Fi, ITS-G5, UWB tracking, Zigbee, Bluetooth, LTE...) to produce advanced, highly-accurate positioning technologies for C-ITS.

The goal of the workshop is to solicit the development of cooperative vehicular communication systems enhancing the position information for future Smart Connected Cars. This workshop will bring together academic and industrial researchers to identify and discuss technical challenges and recent results related to dependable vehicular communications.

HIGHTS
High precision positioning for Cooperative-ITS

This Workshop is organized, in part, by the European H2020 HIGHTS Project.

Important Dates

Full paper submissions: **March15, 2016**
Notification of acceptance: **April 8, 2016**
Final manuscript: **April 22, 2016**

ELECTRONIC SUBMISSION: http://its.papercept.net

WORKSHOP WEBSITE: http://ccp-iv.eurecom.fr

Contributions

Papers should be in English, strictly not exceeding 6 double-column pages. Authors should use the relevant IEEE template, ensuring IEEE Explore compatible PDF-format. Papers will be published in the proceedings of the 2016 IEEE Intelligent Vehicles Symposium and in IEEE Xplore®. Please note that at authors will be required to present their papers in person to qualify for publication of their papers in IEEE Xplore®, as well as in the IEEE IV proceedings.