# HOW COMMUNICATIONS WILL CHANGE VEHICLES AND TRANSPORT

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WORKSHOP ON VEHICLE COMMUNICATIONS AND AUTOMATED DRIVING AND MEETING OF THE COLLABORATION ON ITS COMMUNICATION STANDARDS



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ORGANIZED BY: ITU: International Telecommunication Union CCSA: China Communications Standards Association RIOH: Research Institute of Highway, Ministry of Transportation, China



28-29

JULY 2015 BEIJING, CHINA

**CALL FOR** 

**PRESENTATIONS AND** 

PARTICIPATION

#### INTRODUCTION

ITU, CCSA, and RIOH will convene a workshop on vehicle communications and automated driving; and a meeting of the Collaboration on ITS Communication Standards, 28-29 July 2015 in Beijing, China.

Intelligent transport systems (ITS) and automated driving are fast moving toward widespread commercialization and market acceptance. High levels of automation – the penultimate step to fully automated driving – are expected on the road by 2020 and hold great promise to improve road safety, reduce congestion and emissions, and increase the accessibility of personal mobility.

This international workshop will examine advances in the area of connected vehicles, from the perspectives of technology, business, and regulation. Sessions will discuss vehicle communications; security; the integration of nomadic devices in vehicles; and emerging applications, services, and business models enabled by vehicle communications.

The meeting of the Collaboration on ITS Communication Standards will be an opportunity to translate the workshop's discussions and recommendations into clear actions for the road ahead.

#### SUBMISSION OF PRESENTATIONS

Experts wishing to submit a proposal for a presentation (12-15 minutes) are invited to submit an abstract (max. 350 words), including the title of the presentation, the presenter's full name, affiliation, a short biography, and contact details, to tsbcar@itu.int by 29 May 2015.

Authors will be notified of the acceptance of their proposals by 12 June 2015. The accepted presentations to be submitted by 19 July 2015.

#### **CALL FOR ABSTRACTS**

Interested experts are encouraged to submit an abstract using the following topics as a rough guide:

#### TOPIC 1: EMERGING APPLICATIONS, SERVICES AND BUSINESS MODELS ENABLED BY VEHICLE COMMUNICATION

- Smart transportation in a connected world
- In-vehicle emergency calls
- Electronic toll collection and payments
- Parking guidance
- Mobility solutions
- Usage-based and driver-behavior-based insurance Emergency and disaster response and management
- Cloud computing and connected vehicles

#### TOPIC 2: VEHICLE COMMUNICATIONS, FROM ADAS TO AUTOMATED DRIVING

Protocols and standards for vehicle communications Taxonomy for vehicle automation Future-proof communication systems Communications for vulnerable road users (pedestrians, cyclists, etc.) Harmonization of communication protocols

The role of LTE in vehicle communications

### TOPIC 3: COMMUNICATIONS SECURITY FOR CONNECTED VEHICLES

Security governance

- Over-the-air vehicle software updates
- Secure implementations, dependable design and
- integration
- Privacy
- Cross-border issues and harmonization of trust Interoperability across borders

## TOPIC 4: IN-VEHICLE INTEGRATION OF NOMADIC DEVICES

Vehicle gateway / ITS station gateway Detecting, preventing, and mitigating driver distraction Human-machine interface (HMI) Quality of hands-free communication in vehicle.

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