



CAR 2 CAR Communication Consortium Statement:

Launch of DSRC Technology to Connect Vehicles and Infrastructure in the U.S. in 2021

30 May 2018

In a press release, the CAR 2 CAR member Toyota has recently announced to begin deploying 5.9GHz Dedicated Short-Range Communications (DSRC) in Toyota and Lexus branded vehicles in the USA starting in 2021. At the same time, Toyota encourages all automakers to adopt DSRC in the USA. The CAR 2 CAR Communication Consortium very much appreciates this initiative as it makes use of a hardware platform for C-ITS in Europe and USA. Both USA DSRC and ETSI ITS-G5 base on IEEE 802.11p. The CAR 2 CAR Communication Consortium has in the past years worked closely with its US counterparts to enable this common hardware platform for the US and European C-ITS deployments of ad-hoc wireless Vehicle-to-Vehicle (V2V) and Vehicle-to-Infrastructure (V2I) communication. The announcement from Toyota for the North American market, and a similar notice by Volkswagen for the introduction of ETSI-ITS-G5 based V2X communication for the European market in 2019, confirm that the strategy of a common international hardware is successful and will help decreasing equipment costs.

Toyota and Lexus see the introduction of Dedicated Short-Range Communications (DSRC) as a significant step towards creating a safer and more efficient driving ecosystem, while advancing connected and automated technology deployment.

Similar to ETSI ITS-G5 in Europe, DSRC transmissions enable Vehicle-to-Vehicle (V2V) and Vehicle-to-Infrastructure (V2I) communications – collectively known as V2X. DSRC technology, which has been comprehensively tested through government-industry collaborations and which is already deployed in some areas of the USA, supports the broadcast of precisely anonymised vehicle information several times per second, including location, speed and acceleration. This information can be used by other DSRC-enabled vehicles and devices to help drivers prevent collisions. Communication can also be enabled to provide helpful real-time information to drivers, such as potential hazards, slow or stopped vehicles ahead, or signals, signs, and road conditions that may be difficult to see.

Looking ahead, communication-based technologies such as DSRC can help provide greater benefits to drivers as automakers increasingly equip vehicles with additional sensors, including radars and cameras. Communication technologies can be coupled with on-board sensor technology to help make automated vehicle systems for customers safer, more reliable and more enjoyable.

In the USA, DSRC communicates using seven channels of the 5.9 GHz spectrum band allocated for Intelligent Transportation Systems. For consumers, this is important because the technology, equivalent to Europe, does not require a cellular or data network, and vehicles equipped with DSRC do not incur any cellular network carrier charges. DSRC is based on industry standards, enabling the communication between equipped vehicles and with DSRC roadside infrastructure, multiplying the safety benefits for all.

About the CAR 2 CAR Communication Consortium

Enhancing road safety and traffic efficiency by means of Cooperative Intelligent Transport Systems and Services (C-ITS) is the dedicated goal of the CAR 2 CAR Communication Consortium. The industrial driven, non-commercial association was founded in 2002 by vehicle manufacturers affiliated with the idea of cooperative road traffic based on Vehicle-to-Vehicle Communications (V2V) and supported by Vehicle-to-Infrastructure Communications (V2I). The C-ITS roadmap is formed by the initial deployment phase followed by further innovation phases towards cooperative automated driving and aiming on the vision zero. The Consortium comprises of major vehicle manufacturers, automotive suppliers, engineering companies and research organisations.

Over the years, the CAR 2 CAR Communication Consortium has evolved to be one of the key players in preparing the initial deployment of C-ITS in Europe and the subsequent innovation phases. CAR 2 CAR members focus on wireless V2V communication applications based on ETSI ITS-G5 and concentrate all efforts on creating standards to ensure the interoperability of cooperative systems, spanning all vehicle classes across borders and brands. As a key contributor, the CAR 2 CAR Communication Consortium works in close cooperation with the European and international standardisation organisations such as ETSI and CEN.

Contact:

CAR 2 CAR Communication Consortium
Dr. Karl-Oskar Proskawetz, Administrator
Tel: +49 531 231721-10
E-mail: karl-oskar.proskawetz@its-mobility.de
web: <http://www.car-2-car.org>