

CAR 2 CAR Communication Consortium Statement

Deployment of V2X services based on ITS-G5

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In the light of recent developments in the project landscape for automated driving, the CAR 2 CAR Communication Consortium seeks to deploy wireless Vehicle-to-Vehicle (V2V) and Vehicle-to-Infrastructure (V2I) communication based on the ITS-G5 standard (IEEE 802.11p). The vehicle manufacturers unabatedly see ITS-G5 as essential cornerstone towards safe connected automated driving, and strongly support the recommendation developed by the European Commission's C-ITS Deployment Platform to use this system for short range communication in the 5.9 GHz band. The CAR 2 CAR Communication Consortiums continues to support the European Commission in bringing C-ITS into the market.

Recently, promotion activities for new pre-deployment project on automated driving have caused inquires if ITS-G5 is still be a preferred technology for realising cooperative Intelligent Transport Systems and Services (C-ITS). With the present statement, the CAR 2 CAR Communication Consortium members reassert that they build their C-ITS deployment plans on the European and US market standards ETSI ITS-G5 and IEEE 802.11p, respectively. No changes are made to the agreement of jointly bringing C-ITS into the European market.

This alignment is founded on important ITS-G5 features in comparison with other communication technologies, such as locally self-organising ad-hoc networks, free data transmission and robustness. With these features, the cooperative ITS-G5 system is well designed for safety-related applications. At the same time, the dedication to C-ITS services makes it independent of other third party commercial decisions of whether or not to implement communication networks. The CAR 2 CAR Communication Consortium strongly supports the recommendations established in the C-ITS Deployment Platform. In the final report published in January 2016, the Platform's Working Group 6 Technical Issues – Hybrid Communications and Spectrum Allocation states that “for short range communications in the 5.9 GHz band, initially the communication system to be used is IEEE802.11p/ETSI ITS-G5” (C-ITS Deployment Platform Final Report p. 103).

IEEE 802.11p provides a technology basis for V2X (summarising V2V as well as V2I) communication services not only in the European, but also in US market, which allows the manufacturers to benefit from the economies of scale. At the same time, the Consortium acknowledges that for wide area communication, other types of communication networks provide other advantages, and that ITS-G5 can be supplemented with communication from cellular systems and broadcast systems (TMC/DAB+).

Since its foundation in 2002, the CAR 2 CAR Communication Consortium focused its work on establishing European standards for short range communication between vehicles and traffic infrastructure. The allocation of the 5.9 GHz band for these purposes has mainly been driven by the Consortium. Its members have initiated and supported numerous research projects as well as large scale field operational tests on national and European level. As a result of this, ITS-G5 has proven to be ready for enabling short-range communication. Now that the systems enter into the deployment phase, the Consortium is working closely together with infrastructure deployment initiatives such as the Cooperative ITS Corridor to ensure a seamless market introduction of V2I communication. As infrastructure deployment initiatives will be growing in number, the Consortium commits to keep this collaboration in place.

In line with this, the CAR 2 CAR Communication Consortium will continue to support the initiative of the European Commission's policy efforts to support market developments and deployment of V2X. In discussion with international stakeholders, the Consortium addresses open issues for the earliest possible production and deployment of Vehicle-to-X communication systems based on ITS-G5.



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 with Vehicle-to-Vehicle Communications (V2V) supported by Vehicle-to-Infrastructure Communications (V2I). Today, the Consortium comprises 80 members, with 17 vehicle manufacturers, 39 equipment suppliers and 30 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 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.

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