

C-V2X, Wide Open Road to the Future of Transport in China

The IMT-2020 Promotion Group in China, in partnership with 5GAA, is announcing the first-ever open-road interoperability showcase of multi-brand connected automated driving supported by Cellular-V2X communication. Automotive manufacturers and supplier have gathered from around the world to showcase the performance of their vehicle connectivity products against each other. Taking place on busy Shanghai streets, this large-scale demo brings together over 20 automotive companies, all major chipset-makers, and dozens of terminal and security solutions providers. In total, 50 demonstration teams will be on hand in China on 22-24 October to attest their technologies can all work smoothly and safely together in a real-world setting.

Shanghai, 22 October -- Chinese members of the 5G Automotive Association (5GAA) will conduct a live interoperability showcase of the latest connected driving technology, securely and seamlessly connecting vehicles not only to other vehicles but also to transport infrastructure including busy roads, intersections and smart traffic systems. The demonstration event is a milestone deliverable of the IMT-2020 Promotion Group's *C-V2X 'Four Layers' Interoperability Application Demonstration*.

Attending the ground-breaking IMT-2020 demonstration in China, Maxime Flament, 5GAA's Chief Technology Officer, stressed: "This real-world showcase is all about interoperability between vendors and proving the end-to-end security chain, paving the way for further 5G developments not only in automotive, but also in all sectors relying on fast, secure and seamless connectivity between objects making up the burgeoning 'internet of things' (IoT). 5GAA is very proud to be part of this stepstone towards full deployment of C-V2X in China in 2020."

The event will demonstrate the efficiency of the end-to-end 'vehicle-to-everything' (V2X) standard stack (protocols) and the reliability of security solutions. It underscores the cooperation among all automotive and telecom players in this dynamic ecosystem.

This work is the beating heart of future safe and secure mobility and transport solutions, and it is why 5GAA is playing an active role in it, with the automotive, technology and telecommunications industries working together on joined-up, complementary standards and approaches.

Some 5G and IoT Basics

As countries begin to roll out 5G mobile connectivity in the course of 2019, attention is naturally narrowing down to what this evolution means for industry but also everyday lives. The essence of 5G is that it makes better use of the radio spectrum than previous generations. That efficiency translates into a more stable internet enjoying more bandwidth, faster data speeds, and greater connectivity among ever-more devices at the same time, and across wider areas than previous 4G and LTE mobile networks. Thus, 5G networks will be central to connecting the billions of 'things' (and growing*) that make up the IoT, from connected and autonomous cars to the vast array of smart applications and interfaces used in industry and daily life. Applications increasingly handled by smartphones carried around by some 44%** of the world's population.

The International Telecommunications Union (ITU) and its partners have worked on establishing a truly global benchmark - providing internationally agreed specifications for 5G - for all future mobile-broadband communications adopters. That standard, first laid out in 2012, is now known as IMT-2020^{1*}.

5GAA is uniquely placed to support IMT-2020 developments, as it unites all major cross-sector players (automotive, chipset, technology, telecom-mobile infrastructure and operators) in this field including founding members AUDI AG, BMW Group, Daimler, Ericsson, Huawei, Intel, Nokia, and Qualcomm. In less

¹ See Recommendation ITU-R M.2012 - "Detailed specifications of the terrestrial radio interfaces of International Mobile Telecommunications Advanced (IMT-Advanced)", January 2012, <https://www.itu.int/rec/R-REC-M.2012>

than three years, more than 130 companies worldwide have signed up to 5GAA's mission of helping define and develop the next generation of connected mobility and automated vehicle solutions.

The IMT-2020 Promotion Group live tests of the 'Chinese C-V2X stack' showcase the importance of working together across sectors and regions in achieving this goal, and line up well with other major interoperability activities, the first, held by Omniair, early October in Malaga, Spain² and the second organised by the European Telecommunications Standards Institute (ETSI) to be held in December³.

Note to editors

Images for editorial use available on request; for more information contact [Rundong Yu, yurundong@caict.ac.cn]

* International Data Corporate forecasts the number of IoT 'things' to grow to 41.6 billion by 2025

** Statista estimates that there are 3.3 billion smartphone users worldwide (7.53 billion population)

LTE-V2X Security Demonstration and Verification Project

US stack test (30 Sep-4 Oct 2019): Omniair Plugtest

ETSI tests (2-6 Dec 2019): ETSI standard

About IMT-2020 (5G) Promotion Group C-V2X Working Group

IMT-2020 Promotion Group was jointly established in 2013 by three ministries of China [including the Ministry of Industry and Information Technology (MIIT), National Development and Reform Commission (NDRC) and Ministry of Science and Technology (MOST) (5G)] based on the original IMT-Advanced Promotion Group. IMT-2020 (5G) Group C-V2X Working Group is committed to promote integration innovation among ICT, automobile, transportation and etc. C-V2X Working Group has attracted over 168 members, and a number of partners with 5GAA in common. C-V2X Working Group is the major platform to promote LTE-V2X and 5G-V2X technology research, verification, and industry development in China.

Media Contacts

Rundong Yu

Tel.: +8618511971170

Email: yurundong@caict.ac.cn

About 5GAA

The 5G Automotive Association (5GAA) is a global, cross-industry organisation of over 130 members comprised of leading global automakers, Tier-1 suppliers, mobile operators, semiconductor companies and test equipment vendors. It works together to develop end-to-end connectivity solutions for future mobility and transport services. 5GAA is committed to helping define and develop the next generation of connected mobility, automated vehicle and intelligent transport solutions based on C-V2X.

Learn more on the 5GAA website and follow us on [Twitter](#) and [LinkedIn](#).

Media Contacts

Lisa Boch-Andersen

Tel.: +32 475 45 09 72

Email: lisa.boch-andersen@5gaa.org

5GAA Marketing & Communications

Email: marcom@5gaa.org

² For additional information, see <https://omniair.org/malaga-plugfest/>.

³ More information to come, see https://twitter.com/5GAA_official/status/1171033686717992960?s=20 for a reference.