



# The Future of V2X Communications

1st edition

*The Future of V2X Communications gives a comprehensive overview of the V2X market covering both Cellular V2X and 802.11p-based technologies such as DSRC. This strategic research report from Berg Insight provides you with 40 pages of unique business intelligence including 5-year industry forecasts and expert commentary on which to base your business decisions.*

# The number of cars with V2X capabilities on the roads reached 0.7 million in 2020

Vehicle-to-everything (V2X) refers to communications between a vehicle and the related environment such as infrastructure, pedestrians and network. V2X communications involves vehicles exchanging data with each other and the infrastructure. The broader term V2X is commonly used where the "X" represents for example an arbitrary vehicle or infrastructure node.

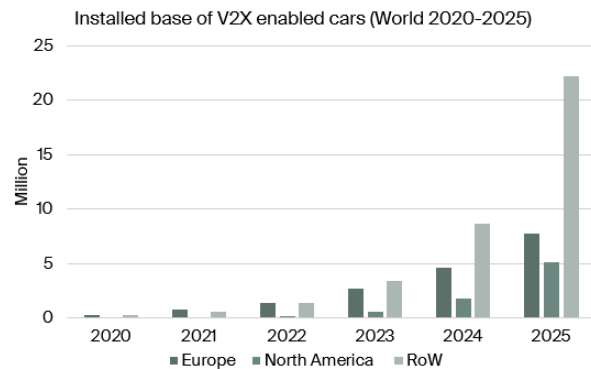
V2X technology can improve driver awareness of upcoming potential dangers and improve collision avoidance, resulting in reduced fatalities and injury severity and potentially enhance traffic efficiency. Additional benefits include warnings for upcoming traffic congestions, proposing alternative routes and smarter transportation management.

Communications between vehicles have been discussed for more than two decades, but with few implementations. Two key sets of V2X direct communications exist: 802.11p-based technologies such as DSRC and Cellular V2X (C-V2X). While 802.11p-based technologies have been deployed in Europe and Japan, C-V2X is gaining momentum in other regions.

Berg Insight estimates that there were about 0.7 million cars on the roads featuring V2X capabilities at the end of 2020. This number is expected to grow to 35.1 million by 2025. It is believed that both 802.11p-based technologies and C-V2X technologies will be in use on the market but with varying success in different regions. The attach rate of V2X will grow from 0.6 percent in 2020 to 23.4 percent in 2025. China is expected to stay in the lead in terms of vehicles equipped with V2X through 2025 and onwards.

Automotive manufacturers can choose between the different connectivity options when creating V2X services. Carmakers that have deployed V2X based on 802.11p-based technologies include Volkswagen and Toyota, whereas C-V2X is backed by Ford, BMW, Audi and the telecommunications industry.

Specialised vendors of dedicated V2X hardware such as roadside units (RSUs) and onboard units (OBUs) include Askey, Applied Information, Cohda Wireless, Danlaw, HARMAN Savari and Commsignia. V2X software vendors include Marben Products and ESCRYPT. V2X hardware vendors sell products to road operators, infrastructure vendors, cities and municipalities and departments of transportation.



## Highlights from the report

**Insights** from numerous interviews with market-leading companies.

**Comprehensive overview** of V2X technologies and key applications.

**Summary** of the latest industry trends and developments.

**Case studies** of more than 10 car OEM V2X telematics initiatives.

**In-depth profiles** of 9 key players in the V2X value chain.

**Extensive** global and regional market forecasts lasting until 2025.

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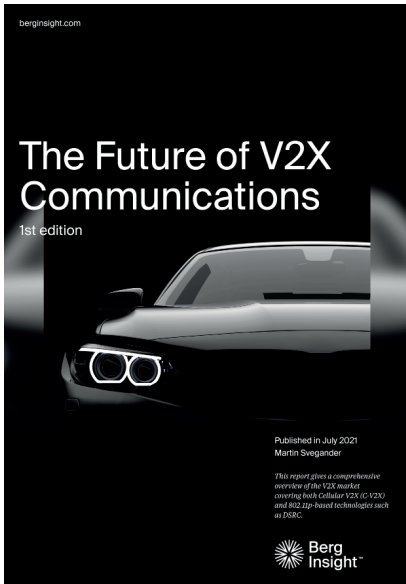
## This report answers the following questions

- Which trends and developments are shaping the market?
- Which are the key application areas for this technology?
- What business models are used by the solution vendors?
- What are the market shares for the leading solution vendors?
- How will the introduction of C-V2X affect the market?
- How will the V2X communications market evolve in the future?



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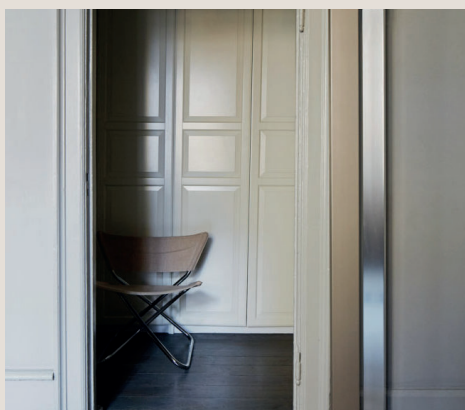


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