

# Connected Vehicles

Applus+ IDIADA supports your development needs for **current and future connected vehicle technologies** including the most widely accepted access technologies:

- Short range communications: ETSI ITS G5/WAVE (IEEE 802.11p)
- Long range communications: From 2G to 5G latest release



We provide **expertise and know-how during the entire development cycle**: from the initial concept stages, through to implementation verification, validation and assessment (including XiL, test tracks and open roads).

Applus+ IDIADA has also deployed **state-of-the-art testing facilities** to provide the necessary flexibility, robustness and safety for the thorough validation of connected vehicle technologies at system and vehicle level. These connectivity features include:

- Proprietary ETSI ITS V2X (WiFi IEEE 802.11p) network able to switch between European and American standards
- Vehicle connectivity testing (vehicle to cloud, cybersecurity) in a controlled environment. Proprietary Mobile Network including new 5G technology

**Connectivity** is also part of regulations for new vehicle type approval. Applus+ IDIADA can support you in your testing and validation of **eCALL, ERA GLONASS** and **UNECE AECS** systems and help you to have them ready for official testing in time.



Applus+ IDIADA can also support you in the **design and development of your test facilities and proving ground, fulfilling your client's requirements based on Applus+ IDIADA's own experience and methodologies:**

- In-house expertise in international automotive testing, engineering and homologation
- Task force with the participation of experts in all CAV development areas
- Experience to design and implement Test Facilities and Proving Ground fulfilling confidentiality and safety requirements
- Independence from OEM's and test equipment suppliers