

# Cooperative Intelligent Transport Systems (C-ITS)

Intelligent Transport Systems (ITS) are the **integration of information and communications technology with transport infrastructure, vehicles and users**. By sharing vital data, ITS allow people to get more information from transport networks, in greater safety and with less impact on the environment. Cooperative ITS (C-ITS) is the area of ITS that deals with **real-time information exchange between road users and infrastructure**, enabling advanced applications and services with a huge potential to **increase comfort, mobility and safety**.



Applus+ IDIADA offers **development and large-scale deployment of C-ITS applications and services** following customer requirements and objectives:

- Interoperable and scalable architecture at different levels
- Backend services: data aggregation, processing and dissemination
- Frontend services: end-user applications
- Multiple technologies: ETSI ITS G5 and cellular
- Large-scale deployment and evaluation
- [Implementation and testing](#) of V2X systems

Applus+ IDIADA provides support in the integration of C-ITS applications into customer's service portfolio e.g. including **cellular or ETSI ITS G5 enabled services** in current ITS platforms and frameworks.



Our own [IDAPT control OBU for CAV applications](#) integrates V2X radio with precise positioning, GPU computing and comprehensive I/O to facilitate the prototyping of C-ITS applications, with either standard or tailored messaging.

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### **C-MobILE project:**

IDIADA is coordinating the [C-MobILE project](#) which aims to demonstrate C-ITS technologies in real-life conditions across 8 European regions based on a common interoperable architecture. Solutions are demonstrated over large urban and extra-urban areas in and around the cities of Barcelona, Bilbao, Bordeaux, Copenhagen, Newcastle, North Brabant, Thessaloniki and Vigo. The large-scale deployment of these technologies can pave the way for a standard EU-wide C-ITS network.

In Barcelona, different services are provided to the users through the [C-MobILE Barcelona app](#) (developed by Applus+ IDIADA). Some of them are roadworks and road hazards warnings, speed limits, GLOSA, approaching emergency vehicles, blind spot and vulnerable road user's detection, etc.

### **C-MobILE project on social media:**

[C-Mobile project on Twitter](#)

[C-Mobile project on LinkedIn](#)

[C-MobILE Barcelona Instagram](#)

[C-MobILE Barcelona Facebook](#)