

The **5GMED** project, with a global investment of 16 Mio euros, aims to **bring a sustainable 5G deployment model for future mobility in the Mediterranean Cross-Border Corridor**. The services to be tested will rely on a broad range of **technologies beyond 5G**, including **on-board sensors and Artificial Intelligence (AI)**, providing advanced connectivity services in a scalable and replicable manner across transport paths.

The infrastructure will support a **remote driving use case, advanced traffic management, applications and business service continuity in railway, and follow-me infotainment** both in highway and railway scenarios.

Methodology

- Cross operator service orchestration.
- Innovations in multi-connectivity supporting high-speed vehicles and trains.
- Self sustainable 5G access network infrastructure that can be deployed when power and backhauling resources are scarce.
- Enhancements to speed up roaming transitions across MNOs and neutral hosts.
- Novel high-speed access network architectures for railways.
- The ability to support AI enabled functions executing at the edge of the network.

Technology objectives:

1. Specify and validate a scalable, cross-border and multi-stakeholder 5G and AI-enabled system architecture supporting CCAM and FRMCS services that can be replicated across Europa.
2. Design and develop cross-operator service orchestration that enables MNOs, neutral hosts and road/railways Infrastructure Operators to deliver service continuity to end-users.
3. Propose and establish novel practices on how MNOs, neutral hosts, OEMs and road operators can cooperate to deliver Remote Driving, Advanced Traffic Management and Infotainment use cases in cross-border scenarios.
4. Identify and establish MNOs and railways operators' cooperation priorities to deliver advanced FRMCS performance and business use cases across cross-border scenarios.

Impact objectives:

1. Contribute to standardization activities through key 5G, automotive and FRMCS SDOs, while collaborating with relevant joint public-private platforms of industry and public authorities, building a harmonized voice towards the implementation of CCAM.
2. Perform a cost/benefit analysis of the 5G infrastructure deployment involving MNOs, neutral hosts and Infrastructure operators in the Figueras-Perpignan cross-border corridor, considering the impact on other business stakeholders.
3. Define innovative business models for CCAM/FRMCS service provisioning, involving MNO and road/railways infrastructure operators, while providing new market opportunities for third-parties beyond the automotive/railways sectors and positioning the role of Public Authorities.
4. Promote a wide and sustainable impact of 5GMed outcomes through dissemination, communication, and active engagement of industry.
5. Ensure the scalability and replication of 5GMed technical and policy outcomes, accelerating and shaping the deployment of 5G cross-border corridors across Europe.

