Press release

5GMED presents solutions for seamless cross-border connectivity

- **This European project lays the foundation for an uninterrupted communications architecture by road and rail between Spain and France**
- **It presents the conclusions of four years of work by a consortium composed of 21 partners from seven countries and with an investment of 16 million euros**
- **The tests carried out have included remote driving, real-time road and rail incident warnings, and uninterrupted streaming transmissions on high-speed trains**

Peralada, June 27, 2024.- The European 5GMED project has presented the conclusions of four years of work to design and implement a cross-border technological architecture between Spain and France that allows uninterrupted high-speed communications on both roads and railways.

This is currently not possible because the existing roaming configuration at the border causes communication interruptions of up to more than a minute when changing countries.

The objective of 5GMED is to accelerate large-scale deployments of 5G and other technologies along European corridors and demonstrate sustainable business models for connected and automated mobility in the future.

With a total investment of 16 million euros, 75% of which has been funded by the European Commission, the project runs from September 2020 to September 2024 and tests a wide range of technologies beyond 5G, including onboard sensors to provide advanced connectivity services in a scalable and replicable manner along transport routes.

The project consortium, led by Cellnex Telecom with i2CAT as the technical manager, is composed of 21 partners from 7 countries, including prominent entities from the telecommunications, transport, technology, research, and consulting sectors such as Mobile World Capital Barcelona, Hispasat, Abertis Autopistas, SNCF, and Vodafone.

The project also receives support from public administrations in both countries, such as the Occitanie Region and the Government of Catalonia, which have promoted the 5G corridor initiative since its inception.

4 use cases to validate the functionalities of 5G services and architecture:

- The 5GMED project has defined a set of use cases to represent the challenges related to cooperative connected and automated mobility and railway applications.
- Remote Driving: Allow autonomous vehicles to request remote assistance in complex traffic situations. A remote driver takes control until the vehicle reaches a safe position to continue driving.

- Road Infrastructure Digitalization: Improve safety and efficiency on highways. A Traffic Management Center will use intelligent strategies based on information from vehicles and road sensors to manage traffic effectively in real time.
- Enhanced Railway Communication Services: Include services such as onboard sensor monitoring, rail safety, high-quality Wi-Fi connectivity, and multi-user mobile services.
- Follow-ME Infotainment: Provide high-quality multimedia content, including live streaming, videoconferencing, and virtual reality to passengers traveling at high speeds by car or train. The challenge is to ensure uninterrupted service while users travel along the cross-border corridor.

A step forward in the community roadmap

The 5GMED project aligns with the European Union's goals for 5G deployment, particularly the objectives set out in the 5G Action Plan and the Digital Decade Communication, which aim for full 5G deployment by 2030.

5GMED is the initiative corresponding to the Mediterranean Corridor, where 55% of road traffic and 65% of rail traffic between Spain and France occur, and the only one that has brought together road and rail use cases under a single project. Other European corridors have promoted tests related to freight transport by truck or sea, such as the 5GBlueprint or 5GRail projects.

In this line, 5GMED has the potential to serve as a model for similar initiatives in other regions and countries. The challenges and solutions addressed by the project, from reducing service interruption times for connected and autonomous vehicles to improving railway communications, have implications beyond the Mediterranean Corridor. This not only paves the way for smoother and safer movement of people and goods but also lays the foundation for more sustainable and interconnected transport systems worldwide.

About Cellnex Telecom

Cellnex is Europe's largest telecommunications towers and infrastructures operator, enabling operators to access a wide network of telecommunications infrastructures on a shared-use basis, and thus helping to reduce access barriers and to improve services in the most remote areas. The company manages a portfolio of more than 138,000 sites, including forecast roll-outs up to 2030, in 12 European countries, with a significant footprint in Spain, France, the United Kingdom, Italy and Poland. Cellnex, which is listed on the Spanish Stock Exchange, is part of the selective IBEX35 and Euro Stoxx 100 and enjoys outstanding positions on the main sustainability indices such as CDP, Sustainalytics, FTSE4Good, MSCI and DJSI Europe.

For more information visit Cellnex Telecom

Corporate Affairs Department
Corporate communication

communication@cellnextelecom.com

Tel. +34 935 021 387
News - Cellnex