5G Corridor project – 5G Autobahn to Autoroute

5G A2A

The project in a nutshell

The 5G Autobahn to Autoroute (5G A2A) project focuses on the timely and cost-effective deployment of 5G infrastructure along a cross-border highway corridor between France and Germany. This initiative supports the transition to innovative mobility by establishing reliable and secure mobile communication, enabling key use cases for Cooperative, Connected, and Automated Mobility (CCAM).

Spanning 60 kilometers, the corridor connects Metz (France) to Saarbrücken (Germany), with 55 km of infrastructure to be deployed along the French highways A4 and A320 and 5 km along Germany's A6.

The project brings together leading industry players and academic institutions, including Orange and Totem in France, as well as Telefónica, Vantage Towers, and htw saar in Germany, ensuring expertise and innovation in delivering seamless cross-border connectivity.

Key facts

Length: 60 Kilometer

Corridor: Metz / France to Saarbrücken / Germany - TEN-T ATLANTIC Corridor

Total EU grant: €3,981,306.00 (50%)

Project duration: 36 months (January 2025 – December 2027)

Transportation mode: Road

Spectrum bands: n78 band with 3.6 GHz (Germany) and 3.5 GHz (France) radio spectrum

Service / Use cases: Enabling the following use cases for Cooperative, Connected and Automated Mobility (CCAM), such as:

- **Cooperative Lane Change (CLC):** support the coordination with other vehicles by enabling reliable communication;
- **Anticipated Cooperative Collision Avoidance (ACCA):** Support sharing information and creating situational awareness for all traffic participants of possible road hazards;
- **Follow-me Infotainment & Video Streaming:** Enabling high data rates for videos and low latency for applications throughout the entire corridor.

What will it provide?

The project will deliver solutions to ensure uninterrupted cross-border connectivity, fostering seamless communication along the corridor. By deploying a robust network, it will enable the testing of innovative services and use cases by various stakeholders, stimulating local economies and driving business activities. Additionally, the project will explore new approaches to deploying passive infrastructure along highways, focusing on faster deployment speeds and reduced complexity.

The deployment of 5G networks is crucial for boosting productivity and innovation across multiple economic sectors in Germany and France. The outcomes of this initiative are expected to serve as a blueprint for other Member States facing similar challenges. The corridor will also act as a long-term testing environment for stakeholders, such as OEMs and MNOs, while contributing to regional economic growth. By enabling future-proof mobility solutions, the project will enhance efficiency, safety, and sustainability in road traffic, thereby supporting the decarbonization of the transport sector.

How will the project unfold?

The project is structured into five work packages, each focusing on the detailed planning, deployment, and operation of 5G infrastructure along the designated cross-border corridor, utilizing the 3.5 GHz spectrum in France and the 3.6 GHz spectrum in Germany. It will oversee the preparation and rollout of shared cellular communication infrastructure while identifying synergies between existing and future mobile network deployments to optimize resources and efficiency.

By enabling the deployment of 5G infrastructure tailored to Cooperative, Connected, and Automated Mobility (CCAM) use cases, the project will develop, implement, and test innovative solutions to ensure seamless, high-quality cross-border connectivity. It will also define the operational and commercial frameworks necessary for corridor deployment and long-term sustainability. A smooth transition between the “plan,” “build,” and “run” phases will be guaranteed, leveraging synergies with other CEF Digital projects to maximize impact and alignment with broader EU goals.

How is it financed?

The project is funded by EU/CEF Digital Grant programme.

Total EU Contribution: €3,981,306.00 (50%)

More information

Latest Generation 5G: Towards a Connected Metz-Saarbrücken Axis for Autonomous and Secure Mobility thanks to Vantage Towers, TOTEM, Orange, O2 Telefónica and htw saar - Newsroom Orange Group

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About

The ambition of the GUIDE project is to bring together the relevant stakeholders from the ecosystem of 5G Corridors across the European Union (EU) and to help them get the maximum value from the CEF Digital programme, ensuring that future CEF Digital work programmes progressively address the actual needs of the stakeholder communities.

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