

Press Release

IMAGINE-B5G Project Drives European Leadership in B5G Innovation

The IMAGINE-B5G project, funded by Horizon Europe and the SNS JU, has successfully completed large-scale 5G/B5G trials across its federated European testbeds. Over the past three years, the consortium validated a diverse set of vertical applications and platform extensions.

IMAGINE-B5G delivers an advanced end-to-end 5G/B5G platform enabling large-scale trials and pilots across Europe. The project federates experimental facilities in Portugal, Norway, Spain, and France, giving SMEs, start-ups, academia, and industry unique access to test innovative vertical applications and platform extensions. Across its three Open Calls, the project funded 45 experiments and achieved strong results across seven verticals: PPDR, media and entertainment, transportation and logistics, Industry 4.0, education, agriculture and forestry, and eHealth.

Capgemini Engineering was part of the IMAGINE-B5G Portugal facility, supporting the deployment and validation of 16 Open Call projects. These included 14 vertical pilots and 2 platform extensions executed under real B5G network conditions. Within this ecosystem, Capgemini Engineering acted as patron for 7 selected projects, providing hands-on support for onboarding, integration, and performance evaluation. Capgemini Engineering was directly involved in projects such as Drone Care Angel (DCA) and ULTRA-FAB5G, focusing on ultra-low latency communications and mission-critical services, as well as in vertical experiments including 5G-EVER and ADS-5G, where it supported system integration, advanced localization algorithms, and end-to-end validation activities.

In addition, Capgemini Engineering acted as a patron for the N-TourXP-5G project, selected in Open Call 2, which focuses on the smart digitalization of tourism and demonstrates the potential of 5G and edge computing to transform visitor experiences. In this project, Capgemini Engineering supported the onboarding and experimentation activities, contributing to the validation of edge–cloud deployments, performance monitoring, and the assessment of KPIs related to immersive and personalized digital tourism services.

Beyond the vertical experiments, Capgemini Engineering also contributed to IMAGINE-B5G platform extensions, namely SRS-B5G (srsRAN Platform Extension) and OPTIMITER, strengthening the platform capabilities in areas such as 5G positioning, monitoring, and energy-aware experimentation. Through these activities, Capgemini Engineering played a key role in bridging platform evolution with real vertical use cases, supporting both experimentation and long-term exploitation of Beyond-5G technologies.

In addition to leading the Work Package “Vertical Trials and Pilots”, Capgemini Engineering also play an active and cross-cutting role in the project by contributing to the development

and validation of a 5G positioning platform used by different Open Calls. This contribution goes beyond Capgemini Engineering own vertical, ensuring that the 5G positioning platform is generic, reusable, and interoperable, enabling its integration and adoption across multiple Open Call projects and use cases. Capgemini Engineering involvement includes requirements definition, technical validation in real-world environments, and the demonstration of 5G positioning as a key enabling capability for different verticals, thereby reinforcing the overall impact of the project.

The IMAGINE-B5G project strengthened European research capacity and reinforced industrial competitiveness by establishing a scalable model for cross-facility experimentation. By validating Beyond-5G technologies in realistic operational environments, the initiative increased confidence in the adoption of advanced connectivity solutions across multiple sectors. The Open Call framework further accelerated market innovation, empowering SMEs and start-ups to mature their technologies through full-scale testing, reducing time-to-market and mitigating deployment risks.

Through this contribution, Capgemini Engineering helped accelerate the development maturity of third-party innovations, reinforcing the platform's role as a collaborative backbone for Europe's advanced 5G pathway towards commercial uptake and broader societal adoption.