



5G Corridors project fiche – Latest 5GS

Latest 5GS: 5G Corridor Study for Latvia, Estonia and Lithuania



The project in a nutshell

The Latest 5GS study, carried out by Tallinn University of Technology (Tallinna Tehnikaülikool - TalTech) together with the Estonian Broadband Association (Eesti Lairiba Arenduse Sihtasutus - ELA SA), Valsts Akciju Sabiedriba Elektroniskie Sakari (VASES), Telia Estonia, and Elisa Estonia, focuses on providing technical solutions and financial model(s) to deploy 5G infrastructure along the Via Baltica and Rail Baltica corridors capable of providing cross-border 5G services in the Baltic States.

Key facts

Length: 695 km

Corridor: Tallinn - Ikla; Tallin – Tartu - Valga (Estonia) / Ainaži - Grenctāle; Valga - Valka (Latvia)

Total EU grant: €249,302

Project duration : 6 months (January 2023 – June 2023)

Transportation mode: Road & Rail

Spectrum bands: 700 MHz, 3.5 GHz

Standards: 3GPP 5G standards used

QoS: 5G coverage improvement along the Baltic transport corridor

Service / Use cases:

Safety-related road and rail operations (Intelligent Transport Systems-ITS, FRMCS, and multiservice/multi-application 5G services)

Specific use cases: real-time services, UAV use, railway telecommunications, and CAM use cases have been researched as the primary 5G coverage use case directions.



What will it provide?

This study will provide technical solutions and financial model(s) needed to deploy 5G infrastructure capable of delivering cross-border 5G services in the Baltic States. Services include, among others, safety-related road and rail operations using Intelligent Transport Systems-ITS, FRMCS, and multiservice/multi-application 5G services. For ITS 5G services, the 700 MHz and 3.5 GHz frequency bands will be studied.

The study will include network planning and stakeholder needs analyses, as well as information on the use of existing infrastructure, fostering the respective region's recovery from the consequences of the Covid-19 pandemic.

How will the project unfold?

The current documentation governing the technical requirements of 5G transport corridors is too general and must be modified for a particular use. Without the collaboration of neighbouring countries via unified rulemaking, successfully adopting 5G technologies along the corridors could be challenging. Passive infrastructure planning should be done simultaneously and sustainably to prevent previously planned network capacity from meeting the necessary technical characteristics when new services are added. For instance, a sustainable 5G network infrastructure must be planned with the existing infrastructure (mobile communication node points) in mind and be based on the 3500 MHz frequency band. Initially, 5G coverage may be built based on the 700 MHz frequency band. All parties involved - the state, MNOs, and users of future services - show a general interest in constructing the 5G network. However, as future services based on the 5G network (i.e. CAM) will have higher technical needs (speed, latency), deploying the 5G network demands significant investments. As a result, substantial investments in hardware purchases, tower construction, optical fibre layout, and infrastructure maintenance are required.



How is it financed?

The project is funded by EU/CEF Digital programme.

Total EU Contribution: €249,302

More information

[Funding and tenders project page](#)

<https://guide.5gcorridors.eu/wp-content/uploads/2023/10/latest-5gs.pdf>

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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