

CEF Digital projects Lessons learned from GUIDE and 5G Corridors

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Introducing the GUIDE project

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.

The GUIDE Project aims to create a diaspore that:

- supports the stakeholders;
- stimulates interest in CEF projects that improve the rollout and uptake of 5G and near 5G services across European transport paths;
- builds a knowledge hub with best practices, performance achievements and legal and regulatory solutions.

The GUIDE project runs from January 2023 to June 2025





GUIDE Project goals

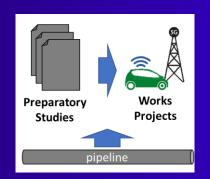
- Annual Editions of the Strategic Deployment Agenda
- Reports on Best Practices
- Contributions to the future CEF and SNS work program documents
- Contributions to the monitoring of the progress of the CEF programme
- Identification of the opportunities for follow on projects in the CEF portfolio and the stimulation of such proposals.













5G Corridors Projects

13 Studies12 Works Projects

CEF-Digital funded 5G corridor projects: Call 1 & 2 & 3

Study projects

5G Brno - Bratislava

Brno (CZ) to Bratislava (SK) ~ 140 km

5G MELUSINA

Luxembourg (LU) to Metz (FR)

5G on Track

Mulhouse (FR) to Karlsruhe (DE) ~ 200 km

5GCarolina

Prague (CZ) to Munich (DE) ~ 70 km

5G Gail

Udine (IT) to Villach (AT) ~ 200 km

5G Estuary

Antwerp (BE) to Vlissingen (NL) ~ 260 km

DIGLatest 5GS

Tallin (EE) to Vilnius (LT) ~ 670 km

ЕИМОВ

Bordeaux (FR) to Barcelona (ES)

~ 9500 km

5G ADRIA

Koper (SI) to Rijeka (HR) ~ 378 km

5G FREJUS

Fourneaux (FR) to Bardonecchia (IT) ~ 26.5 km

5G HSL EUROLINK

Paris (FR) to Brussels (BE)

~ 468 km

5G-SITACOR

Udine (IT) to Postojna (SI) ~ 275 km

5G GIGARAIL

Arnhem (NL) - Emmerich (DE)

~ 30Km

Works projects

5G SEAGUL

Sofia (BG) to Velestino (EL) ~ 473 km

MEDCOR5G

Barcelona (ES) to Montpellier (FR) ~ 548 km

5G DeLux

Frisange (LU) to Saarbrucken (DE)

5.65 10011

5G NETC

Malmö (SE) to Helsinki (FI) to Riga (LV)

~ 3354 km

BALTCOR5G

Czestochowa (PL) to Ostrava/Svinov (CZ)

- 147 km

5G4RailsScand

Copenhagen (DA) to Oslo (NO)

~ 800 Km

5G CarolinaPlus

Muenich (BU) to Carlsbad (CZ)

~ 85 Km

5GA2A

Metz (FR) to Saarbruecken (DE)

~ 60Km

5G TRACKS

Sofia (BU) to Alexandroupoli

~ 760 Km

5G BLK

Sofia (BU) to Dimitrovgrad (SE)

~ 130Km

5G BALTICS

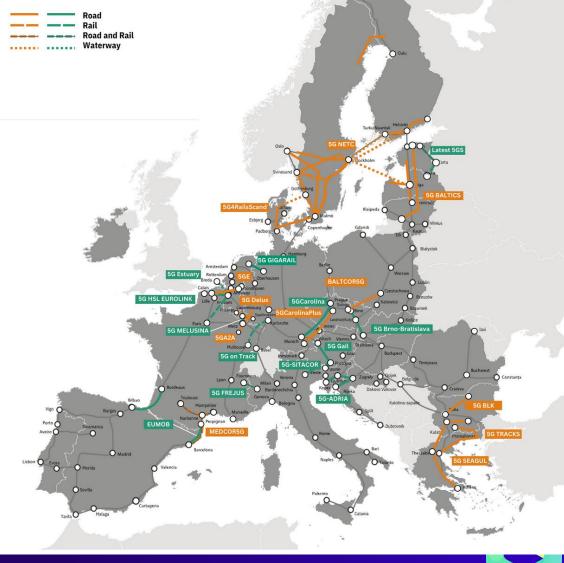
Tallinn (EE) to Kalvarija (LITH)

~ 663.2Km

5G E

Liège (BE) to Antwerp (BE)

~ 157Km





3 surveys have been conducted during the project life to capture practices

The objective is to better understand the purpose and objectives of the studies and works projects, and the solutions put in place, the 5G corridor deployment process(es) and the ability to replicate it in other locations.

The questionnaire is addressing 6 domains:

- 1/ Technical (12 questions)
- 2/ Replicability (5 questions)
- 3/ Deployment (8 questions)
- 4/ Regulation (2 questions)
- 5/ Operation (3 questions)
- 6/ Best practices (4 questions)

Detailed information will be available soon in the

D3.2: CEF Best Practices Handbook 2024/25





What are the good practices? (Studies)

- To involve key stakeholders regularly through the whole project for open and transparent discussions to have a common understanding on the situation.
- Social Impact analysis
- Agreement with mobile operators and communication with operators
- Use of the theoretical, concept & deployment best practice from other 5G highway corridors.
- The pooling of infrastructure between MNOs and railway companies is an experiment. This mutualisation is experimental because we could share construction costs.
- Cross-industry collaboration, the ability to innovate & support by political agenda (green deal, modal change, CO2 reduction)
- Standard Framework already in place for working for safety and working procedure working in rail and road tunnels
- Create and review network plans, Ensure the network is adaptable to support new technologies, Collaborate to continuously improve and stay updated with the latest tech



What are the good practices? (Works)

- The learning and insights gained from work in terms of challenges/obstacles,
 - necessary processes and licensing,
 - timetables for roll-out and configuration,
 - best practices for network interconnection and roaming configurations, etc., .
- Good architecture definition.
- Stakeholders value chain definition
- Preparation of requirements and contracts, involving all parties from the start
- Efficient RFQ execution and inclusive stakeholder involvement are crucial.
 Strong planning, reporting, and monitoring of subcontractors ensure timely, quality outcomes
- Cross-border cooperation between Partners of the Consortium





Summary Conclusions

- Results from running and completed projects can show what is possible for 5G Corridors
- Projects contain some generic approaches that are reusable, but also have specific implementation details that are not inherently suitable for sharing.
- Half of Studies felt they had achieved enough to go forward with a Works proposal
- Business models remain an issue
- Common partners seem to be the most efficient method of bringing forward best practice
- Common scenarios are obviously the most suitable for reusing lessons learnt.
- 5G Corridors program is making the opportunities and possible solutions more visible







Thanks!

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