



5G Corridor Deployment in Europe

A European Commission Perspective

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*5G Corridors Workshop, 16 October 2024
a CEF Digital event organized by GUIDE*

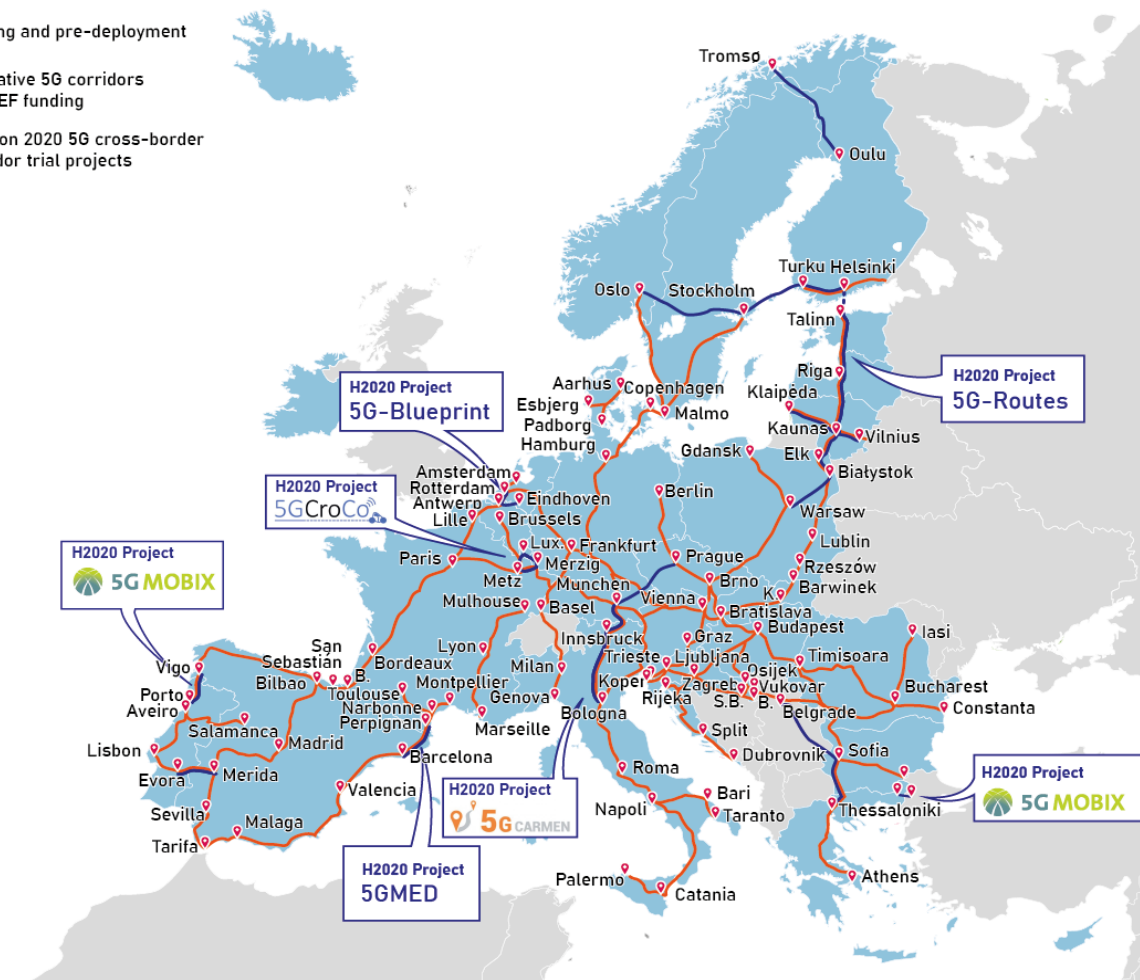


5G Corridors: a driving force behind the EU Green and Digital Transition

- Digital Decade: Pan-European deployment of 5G corridors along TEN-T road, rail, waterways
- Massive investments required for a fully-fledged TEN-T 5G corridor deployment > EUR 25-79 bn
- Lessons learnt from Horizon 2020 cross-border large-scale trials projects
- Priority sections of TEN-T corridors identified in CEF Regulation: 26.000km in length, 49 intra-EU borders
- CEF Digital WP1, budget spent: EUR 93MM (3 calls) 2021-23
- CEF Digital WP 2: EUR 205 million 2024-27 for 5G, adopted in October 2024
- Guidance coordinated by the SNS JU, based on 5G Strategic Deployment Agenda Road and Rail



- Testing and pre-deployment
- Indicative 5G corridors for CEF funding
- Horizon 2020 5G cross-border corridor trial projects



The 5G-Edge “continuum”

Large-scale 5G deployments

< Edge-Cloud infrastructure >

Local 5G systems



Major transport paths



Smart Cities



Rural areas

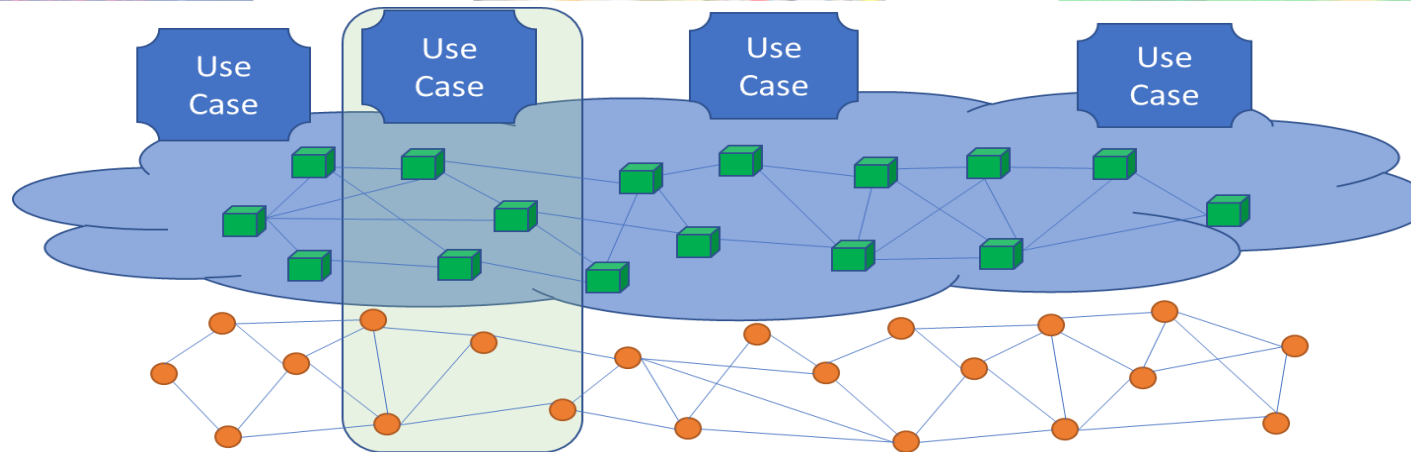


Geographical continuum:

From main corridors and cities to local communities and villages

Edge-Cloud infrastructure

Connected objects and devices (IoT)



Technology Continuum:

Application-driven vertical integration, stimulus to EU digital supply chain

Creating the Connected Collaborative Computing Network (3C Network)

CEF-Digital Programme: 2021-27



Work Programme 1: 2021-23, € 682 MM budget was foreseen
Budget consumption based on Calls 1,2, 3 (Call 3 results still under grant agreement preparations)



5G for Transport Corridors
25 projects, € 93 million

5G & Edge Computing for Smart Communities

42 projects, € 135 million

Digital Global Gateways

51 projects, € 420 million

Quantum Communication Infrastructure

Call postponed to 2024

Operational Digital Platforms

Call in 2025

Support Actions

3 projects, € 7 million

Work Programme 2024-27: € 865 million

Note: Call 3 results are indicative and will only be official once Grant Agreement Preparations final, by 12/2024

CEF-Digital Programme 2: 2024-27- 5G LSPs

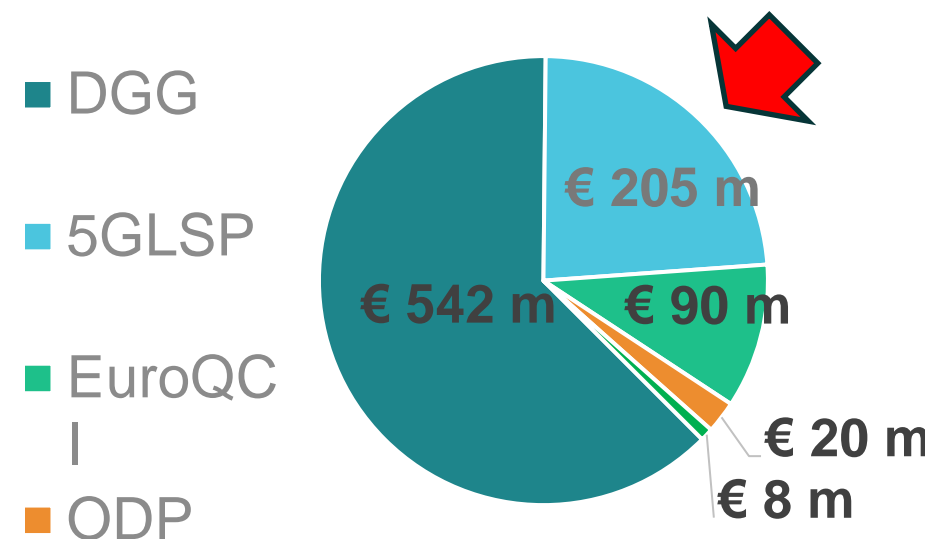
- Focus shift on to 5G Large Scale Pilots → **5G stand-alone integrated with edge computing facilities**
 - Alignment with the **Connected Collaborative Computing** narrative of the *White Paper on Europe's Digital Infrastructure**
- 5G Corridors and 5G Smart Communities regrouped under the 5G LSP umbrella, under Connectivity Funding
- Harmonised cybersecurity provisions across all subtopics
- 5G Corridors EU Grant: 52.5 million €
- Top-up Invest EU Blending: 2025-27

**White Paper on 'How to master Europe's digital infrastructure needs?'*

CEF Digital WP 2, 2024-27: EUR 205 MM for 5GLSP

Two financial implementing modes:

1. 2024: EU Grants via Call 4 for continuity
 - 5G Corridors: 52,5 MM €
 2. 2025-27: blending under InvestEU (top-up with EIF) to scale up
 - 5G LSP: total budget of 205 MM €
 - of which, 50 MM € for 5G Corridors
- Support Actions to monitor performance



Launched: call 1&2 projects

Study projects

Works projects



- 18 projects: 12 studies & 6 works
- a good mix of road, rail and maritime projects
- EU grants requested = € 42,3 MM
- Total cost = € 105,8 MM
- Length of deployed 5G corridors: 4252km
- Number of intra-EU borders covered: 19

Up to 50% co-funding

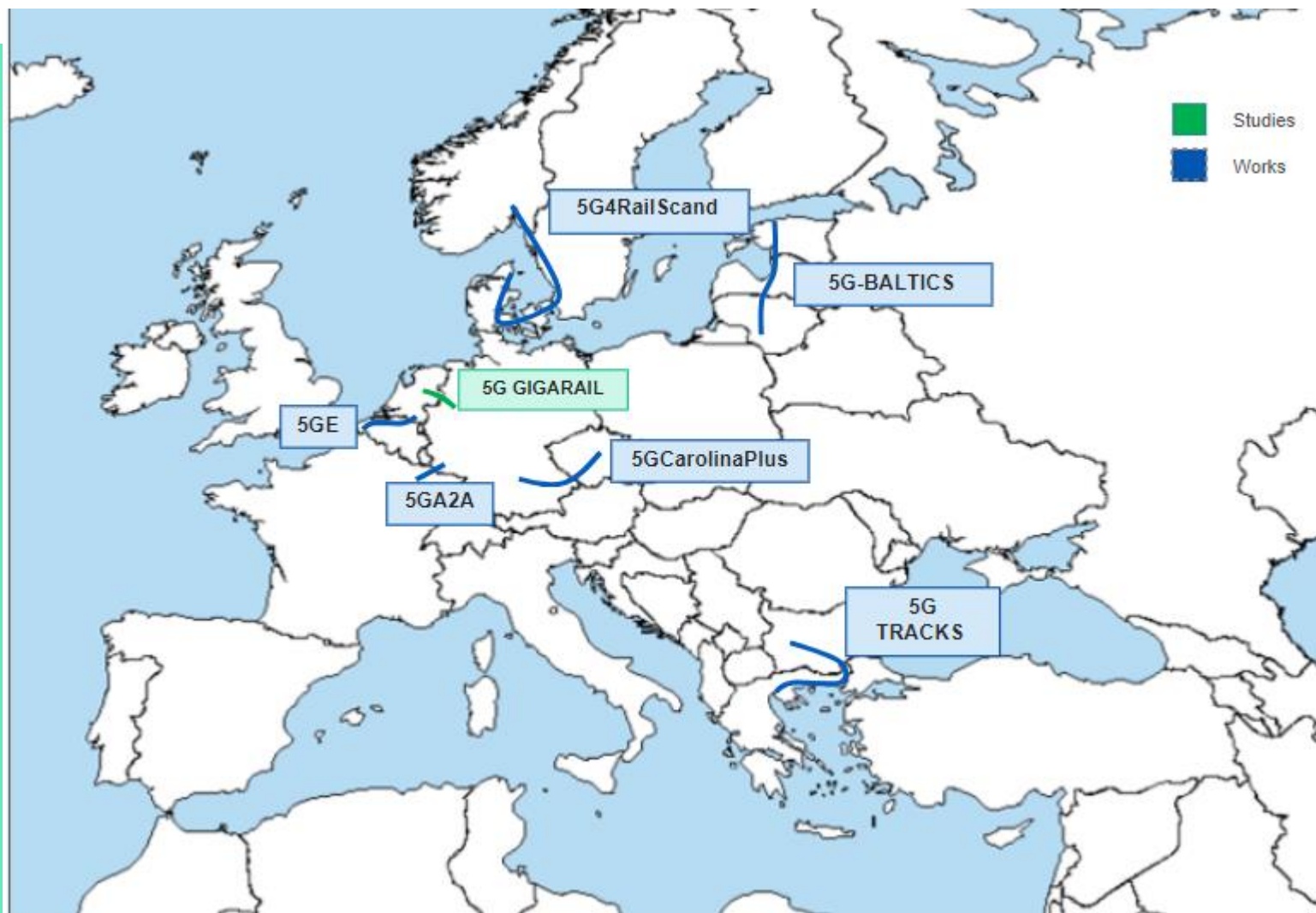


Ongoing: call 3 proposals undergoing GAP

7 projects: 6 works, 1 study

- 4 Road projects (EU contribution € 28 million)
- 2 Rail projects (EU contribution € 19 million)
- 1 Waterway/Maritime project (EU contribution € 3.7 million)
- Total EU contribution: € 51 million

up to 50% co-funding



Connections shown are approximate

Call 3 projects are still under grant agreement preparation and could be subject to change

What's Next?

- Call 4 will be published shortly and is expected to close in Spring 2025
 - Info-day foreseen within two weeks of the call opening
- Both, 5G and 5G Smart Communities will be part of the same 5G LSP Call
- Indicative budgets for 5G LSP of ~ € 105 MM / 5G Corridors € 52.5 MM
- Follow HaDEA social media channels or register on the F&T portal to be prompted

Note: budgets are indicative; adjustments are possible depending on demand and relative quality of proposals



Thank you for your attention !

<https://digital-strategy.ec.europa.eu/en/policies/cross-border-corridors>

