CEF Digital
EU infrastructure funding
2021-2027

Workshop – Lisbon - 13 November 2019

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Financial support for broadband under the next MFF

Structural and Investment Funds (ESIF)	Connecting Europe Facility (CEF) – Digital	InvestEU
• ERDF: broadband investments under **priority objective 3**, together with transport and energy infrastructure • EAFRD: broadband investment **only** as part of local development projects	• **EUR 3 bn** • Focus on connectivity infrastructure to enable digital transformation • Synergies with CEF transport and CEF energy networks within CEF Programme	• Part of Sustainable Infrastructure Window • **11.5 bn guarantee** available for broadband investments, *but* also other infrastructures

CEF DIGITAL 2021-2027 - €3 billion

- Alignment with Gigabit Society Strategy objectives: supporting MS in addressing the overall funding gap (€155 bn) with strategic projects
- Complementarity with Digital Europe, structural funds & InvestEU

- **Cross-border 5G automotive corridors (but also railways, inland waterways)**
- **Gigabit connected hospitals, schools, business parks, public Wi-Fi & coverage of surrounding areas (5G communities)**
- **Key international/ cross-border connectivity**

Delivery Mechanism

- Stronger **alignment between policy objectives**, specific objectives and eligible actions
- Detailed provisions to be set in **work programmes**, taking into account the **prioritisation** defined in the Regulation
- Close **involvement of MS** (agreement on [most] projects submitted, adoption of the work programmes and decision on funding to be granted in CEF Committee)
- **Direct management** by the Commission with possibility to delegate to INEA or use indirect management
- **Technical and administrative assistance** for project preparation and capacity building up to 1% of the budget

CEF DIGITAL 2021-2027 - Timeline

Commission proposal
June 2018

Political agreement *with []*
8 March 2019

Stakeholder Consultations
March/April/May 2019

Consultations in CEF Expert Group
June 2019

Consultation on Implementation Roadmap
June – September 2019

Closing MFF negotiations
December 2019

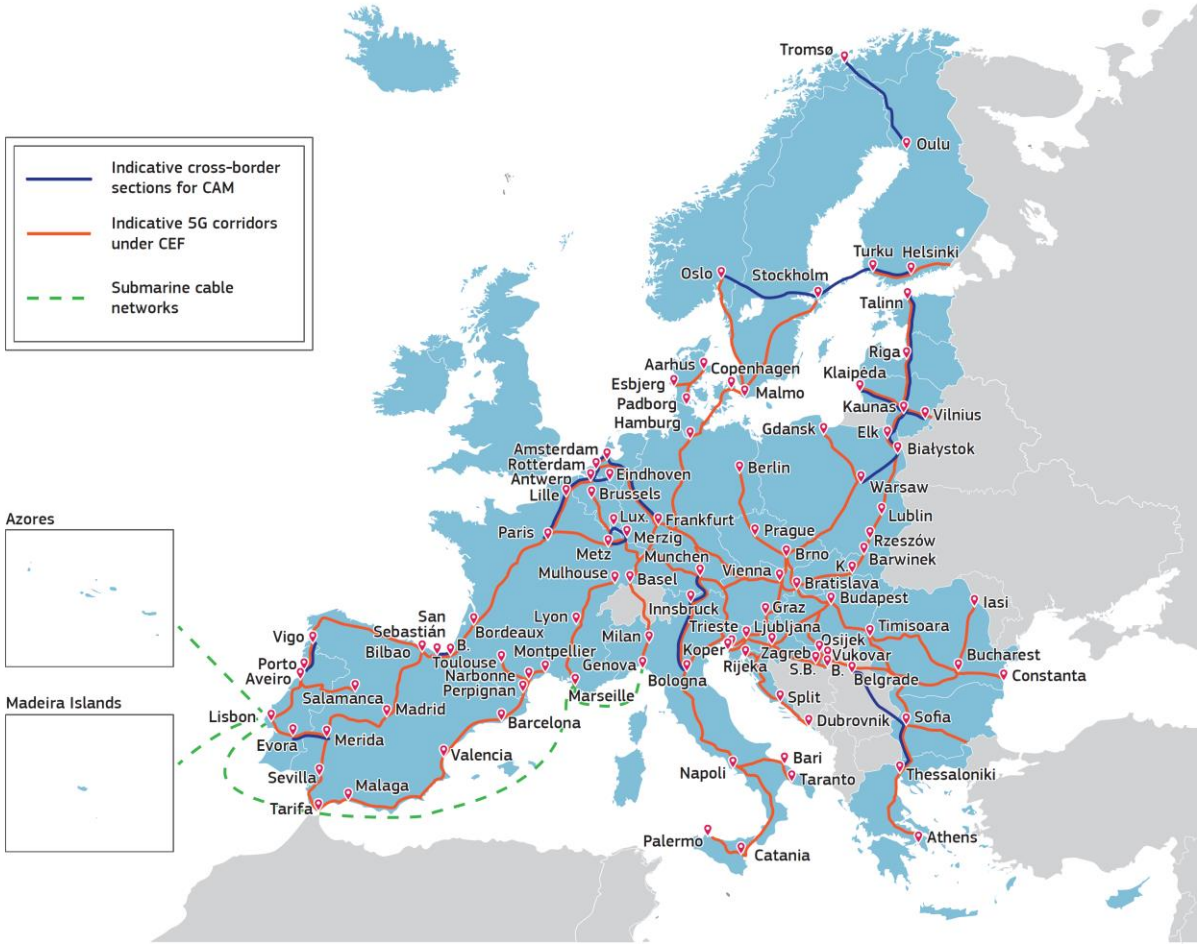
First Multiannual Work Programme
End 2020

5G corridors along transport paths

- **Uninterrupted 5G coverage of <u>cross-border sections</u> on pre-agreed (indicative) corridors**
- **5G coverage of other transport paths (rail, inland waterways)**

Strategic deployment agenda & cross-sector public - private partnerships

Complementary to Digital Europe and Horizon Europe Programmes



Work in progress

5G corridors along transport paths

Prospective beneficiaries: consortia (5G service providers, passive and active 5G infrastructure and equipment, authorities, etc.)

Focus on cross-border sections of politically pre-agreed corridors (up to 50% co-funding rate, e.g. 15-18 mln EUR projects)

Access to roads and spectrum as pre-condition & commitment to intra-MS continuation of service

Open questions:

1. *How to establish market failure in cross-border sections?*
2. *Which synergies of public policy objectives & commercial goals?*
3. *What options for co-deployment/consortia: Wholesale access, multiple services on one infrastructure, slicing?*
4. *What target functionalities and implementation milestones (e.g. coverage, quality and service requirements, timeframe)?*
5. *What interest in 5G for rail and inland waterways?*

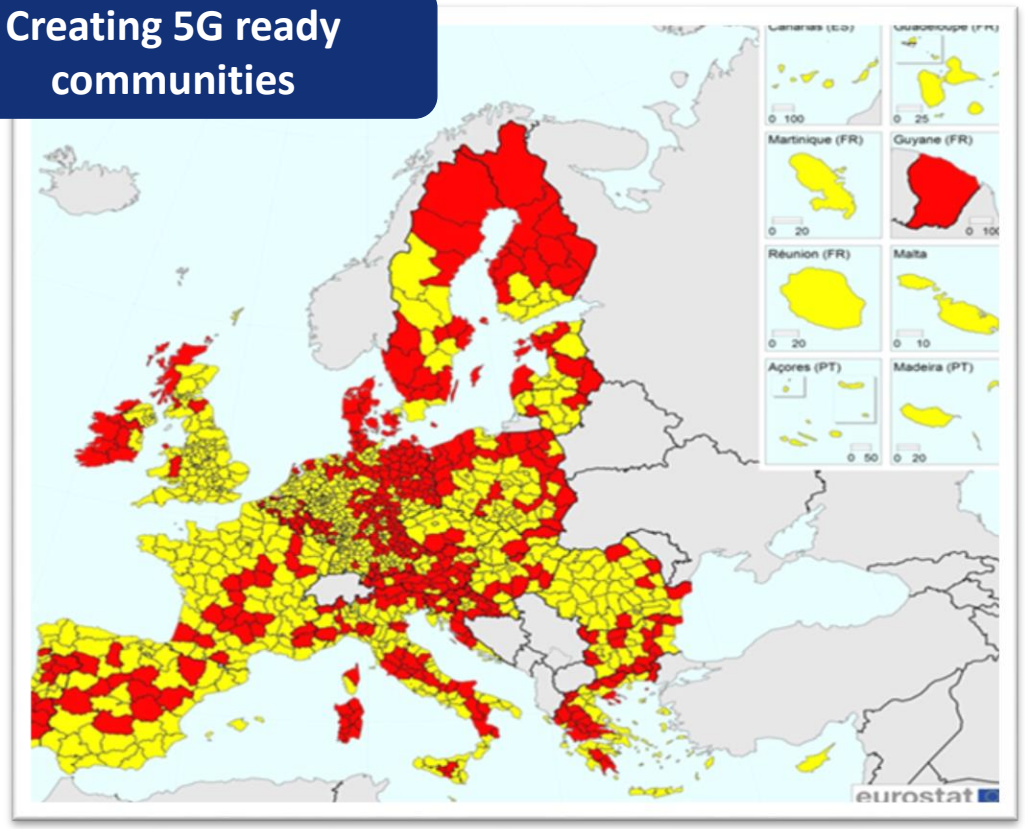
Gigabit connectivity for socio-economic drivers & coverage of surrounding households

- **VHC (including 5G) connectivity to as many socio-economic drivers as possible**
- **Maximising number of household coverage in the surrounding areas**

- Boost use of online services
- Reduce digital divides
- Maximising the reach of private investments

- Complementarity with Digital Europe Programme
- Delineation from structural funds and InvestEU

Creating 5G ready communities



Work in progress

5G ready communities in Europe

Prospective beneficiaries: VHCN/5G network providers, public authorities, financial intermediaries for blending

Eligibility: **non-VHCN areas/SEDs**, subject to funding plans including planned ESIF interventions / commercial plans within the next 3 years

Selection criteria:
- **number of SEDs covered** +
- **resource efficiency** (grant needed for coverage generated) +
- **deploy and operate 5G use cases**

Project size:
- up to 20 mln EUR for SEDs only,
- up to 60 mln EUR for 5G communities,

Max. co-funding rate: up to 75 % for Gigabit to SEDs, 30 % for household VHCN deployments

Open questions:

1. *What is the interest in stand-alone SED calls?*
2. *Are there similar planned ESIF investments (or other public funding programmes), including post 2020?*
3. *What is the connectivity gap for (which) SEDs in MS? Vis-à-vis area coverage?*
4. *How will MS support building a national project pipeline for later approval of applications?*
5. *What 5G use cases should be considered?*

The WiFi4EU voucher programme

Call 1: EUR 42 million

- **2,800 vouchers awarded**
- Call launched on November 7, 2018
- 13,200 applications
- 3,500 applications in the first 5 seconds
- Italy, Germany, Spain, France reached their maximum vouchers within the first seconds

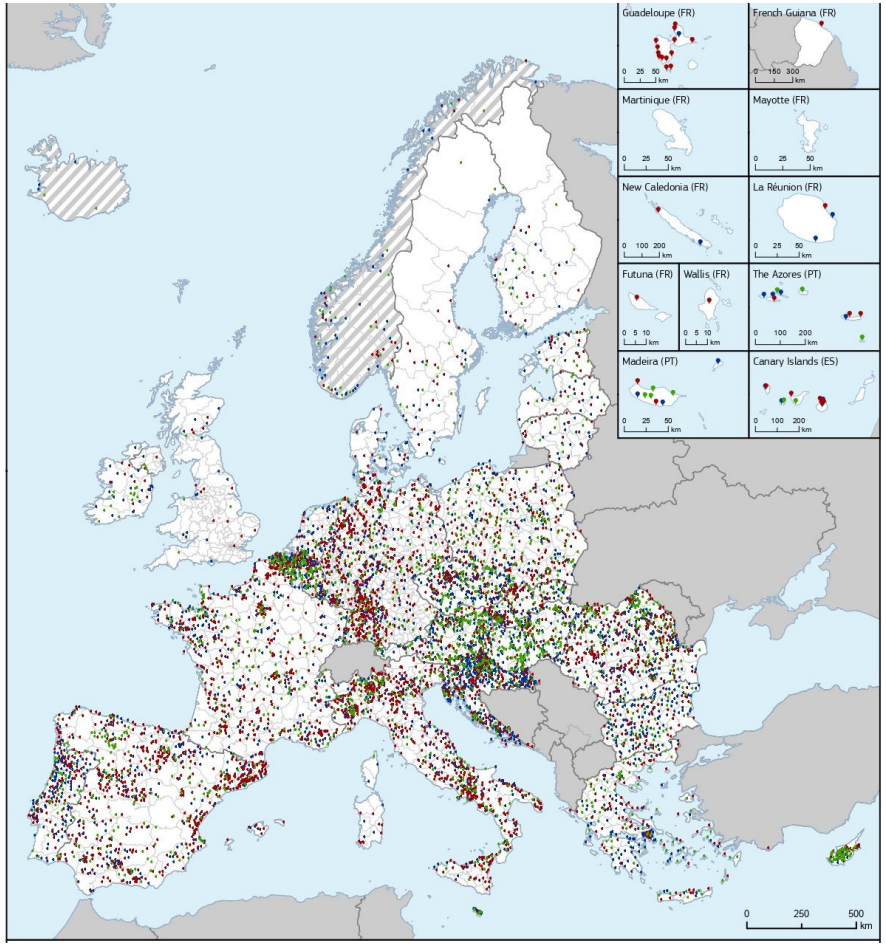
Call 2: EUR 51 million

- **3,400 vouchers awarded**
- Call launched on April 4, 2019
- Close to 10,000 applications
- 97.5% of available vouchers were claimed in the first 60 seconds
- Italy, Germany, Spain, reached their maximum vouchers within the first seconds

Call 3: EUR 26.7 million

- **1,780 vouchers awarded**
- Call launched on September 19, 2019
- Close to 10,000 applications
- Italy, Germany, Spain, Austria, Hungary and France reached their maximum vouchers within the first seconds

- WiFi4EU will give **free internet access** to local residents and visitors throughout the entire EU in the main centres of community life.
- Municipalities and groups of municipalities can apply for **EUR 15,000 vouchers** assigned on a first-come first-served basis.
- Municipalities need to ensure that the internet access is guaranteed for at least **3 years**.
- WiFi4EU-funded network must be **free of charge, free of advertising and free from commercial re-use of data**.



Map of awarded municipalities (Call 1,2,3)
Countries such as Bulgaria, Croatia, Ireland, Lithuania, Portugal and Slovenia have more than 70% of their municipalities among the winners of Call 1, Call 2, Call 3

Work in progress

Next generation WiFi4EU & 5G Synergy Projects

Next generation "WiFi4EU"

and/or

5G+ communities

- Synergies with SED connectivity, Digital Europe Programme (5G vertical use cases)
- Synergies within CEF (e.g. for urban transport, smart electricity, etc.)

Possibilities for smart cities, designation of 5G cities according to 5G Action Plan

Simplified grants (vouchers, unit costs) for communities w/o vouchers and/or committing to operate 5g ready small cells

Max. co-funding rate: up to 100 % for small value vouchers; 30 % for small cell deployment

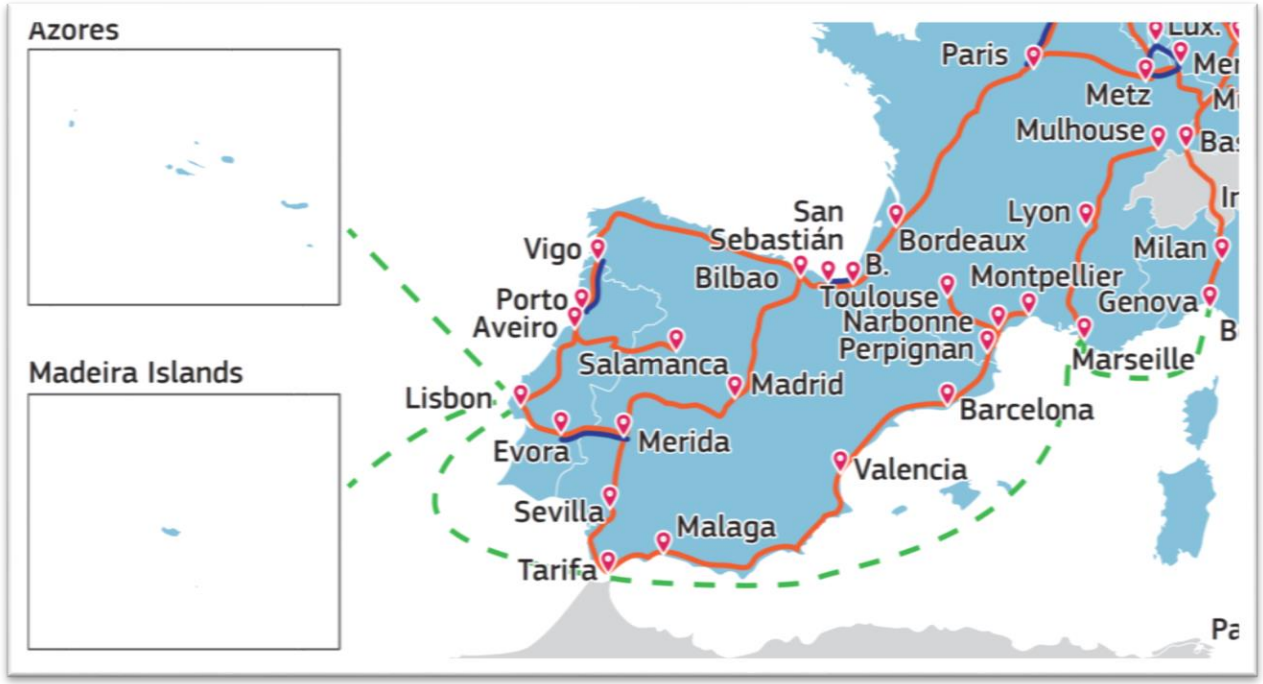
Open questions:

1. *Is there continued interest in WiFi4EU deployments?*
2. *Interest of cities to deploy and use 5G networks?*
3. *Interest to simultaneously use commercial 5G service and free of charge Wi-Fi?*
4. *Which smart city 5G use cases should be prioritised?*
5. *Potential synergy projects?*

Key international and cross-border HPC connectivity

Terabit links making high performance computing (HPC) available throughout Europe

Increasing capacity & resilience of connections to EU islands or between EU and external hubs

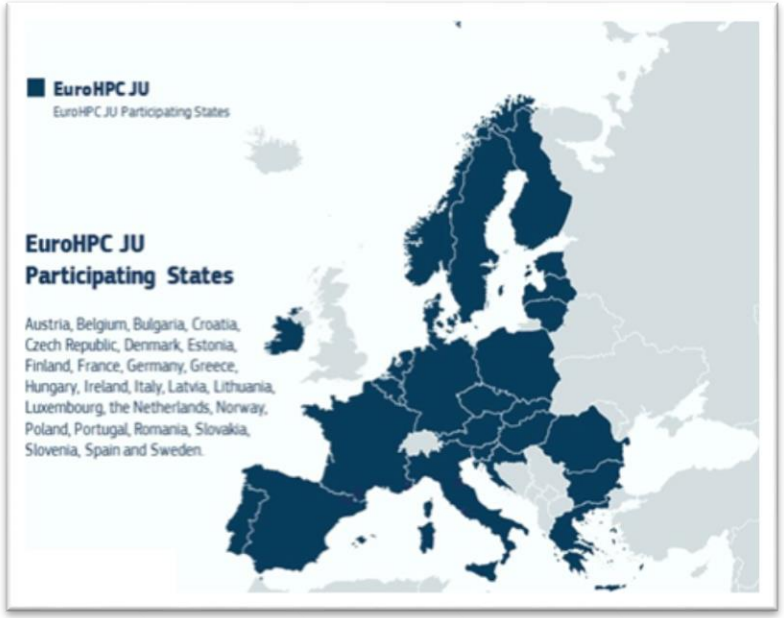


Max. co-funding rate: normal 30%, up to 50% for cross border projects)

Work in progress

Cross-border HPC connectivity

Terabit links making high performance computing (HPC) available throughout Europe



Cooperation / Partners (TBC)

- Geant
- EuroHPC JU
- Network providers

Possible projects: links to e.g. Digital Innovation Hubs; to HPCs (i.e. also commercial connectivity)

Open Questions:

1. *Which are the best placed beneficiaries in MS to maximise accessibility to HPC capabilities?*
2. *How to best link commercial HPC users to the HPC backbone network?*

Max. co-funding rate: normal 30%, up to 50% for cross border projects)

Work in progress

Key international backbone connectivity

Increasing capacity & resilience of connections to EU islands or between EU and external hubs

Prospective beneficiaries: submarine cable consortia foreseeable, with MS backing

Possible projects: Azores-Madeira-PT, MT- Sicily, FI to Asia (Northeast Passage), Lisbon-Marseille-Milan, etc.

Possible eligibility & selection criteria: market failure, (required) increased capacity and resilience, security, other qualitative connectivity improvements

Max. co-funding rate: normal 30%, up to 50% for cross border projects)

Open Questions:

1. *Concrete MS project proposals?*
2. *How to assess contribution to Gigabit objectives?*
3. *Estimated capacity needs & funding gap?*
4. *What form public support (anchor customer, grant, financial instruments)?*

Work in progress

Key international and cross-border HPC connectivity (2)

Eligible actions (Art. 9.4(d)):

(d) actions supporting **deployment of new** or **significant upgrade of existing backbone networks** including submarine cables, **within and between Member States** and between the Union and third countries;

Prioritisation of actions (Art. 8.3.(d)):

(d) projects aiming at the deployment or significant upgrade of cross-border backbone networks **linking the Union to third countries** and **reinforcing links between electronic communications networks within the Union territory**, including submarine cables, shall be prioritised according to the extent to which they **significantly contribute to the increased performance, resilience and very high capacity** of those electronic communications networks;

Policy objectives / KPIs:

- Ensuring an **HPC terabit backbone** that reaches all MS
- Making HPC computing power commercially available for industry
- Increasing **backbone capacity/resilience** for EU islands/between MS or between the EU and external hubs

Synergies: Transport – Energy – Digital

Decarbonisation and digitalisation of the Union economy implies a growing need for synergy between transport, energy and digital sectors

- ✓ "**operational digital platforms”** which support the flow, storage, processing and analysis of transport and/or energy infrastructure data can be funded under CEF DIGITAL
- ✓ Possibility to adopt **joint work programmes** on specific topics (e.g. Connected and Automated Mobility)
- ✓ The **higher co-funding rate** of the sectors concerned could be applied, which **may in addition be increased by 10%**
- ✓ For each sector **synergetic elements** pertaining to another sector could be eligible up to 20% of the total eligible cost (e.g. fibre deployment or energy regeneration within a transport project)

Work in progress

Operational Digital Platforms

Definition (Art 2(l))

(l) "operational digital **platforms directly associated with transport and energy infrastructure**" means physical and virtual information communication technology ("ICT") resources, operating on top of the communication infrastructure, which support the flow, storage, processing and analysis of transport and/or energy infrastructure data;

Eligible actions (Art. 9.4):

(f) actions implementing **digital connectivity infrastructure requirements related to cross-border projects** in the areas of transport or energy and/or supporting operational digital platforms directly associated to transport or energy infrastructures.

Prioritisation of actions (Art. 8.3.):

(f) with regard to projects deploying operational digital platforms, priority shall be given to actions based on **state-of-the-art technologies, taking into account aspects such as interoperability, cybersecurity, data privacy and re-use**.

Policy objectives/ KPIs:

- Operational digital platform for Connected and Automated Mobility (CAM) services to be available along all EU 5G corridors.
- Operational digital platforms for 5G along rail and/or inland waterways

Conclusions

- **European Dimension of CEF2**
  - Pan-European, cross-border, (inter-continental)
  - EU gigabit policy targets
  - Vertical integration across EU business & industrial ecosystem
- **Implementation is key**
  - Robust project pipelines
  - Lean, flexible and concise
- **Your network is crucial for CEF2 success**
  - Work programmes
  - Project facilitation and capacity building

#CEF2digital

Thank you for your interest!

To be continued…

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