

# CEF Digital EU infrastructure funding 2021-2027

Regional workshop – Nicosia - 17 September 2019

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### Financial support for broadband under the next MFF

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



### **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

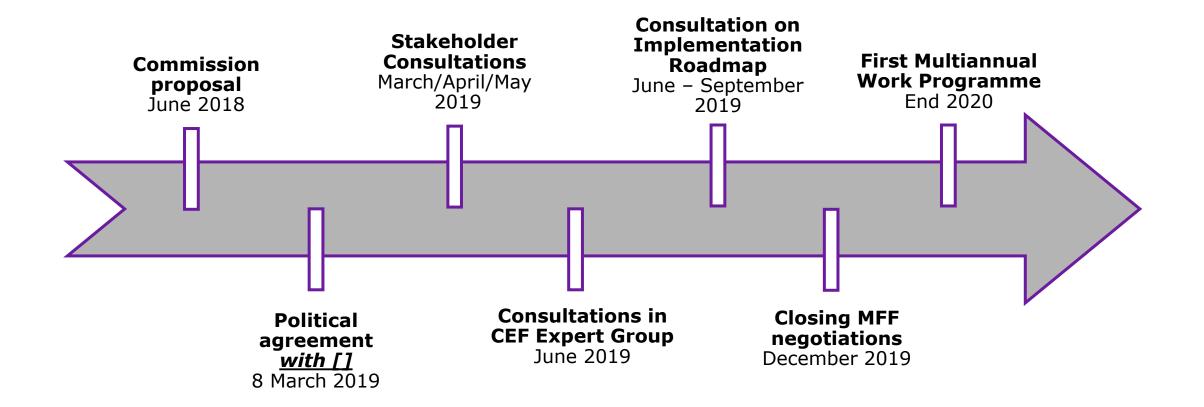


## **Delivery Mechanism**

- 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**



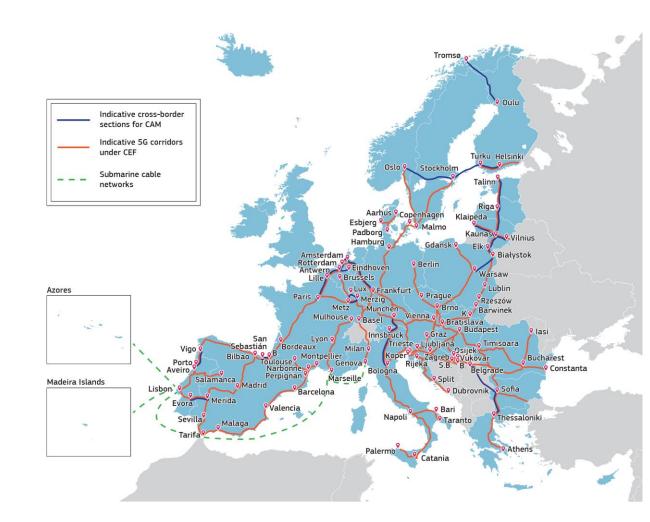


### **5G corridors along transport paths**

- 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





### 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 precondition & commitment to intra-MS continuation of service

#### **Open questions:**

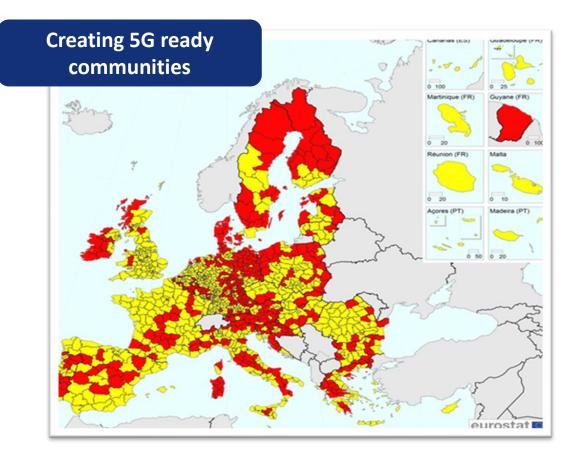
- 1. How to establish market failure in cross-border sections?
- 2. Which synergies of public policy objectives & commercial goals?
- 3. What options for co-deployment/consortia: Wholesale access, multiple services on one infrastructure, slicing?
- 4. What target functionalities and implementation milestones (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 socioeconomic 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





### 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

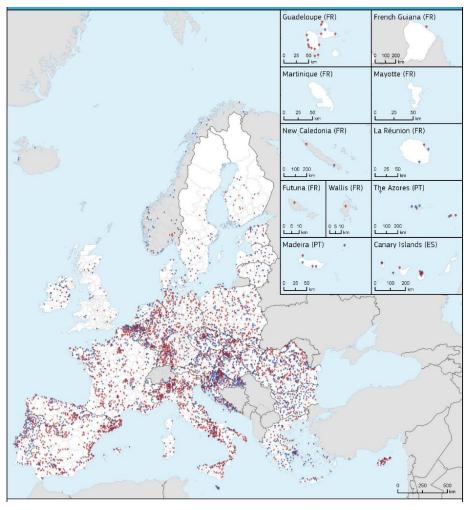
#### Call 1: EUR 42 million

- 2,800 vouchers awarded
- Call launched on November 7, 2018
- 224 maximum vouchers per country
- **15** minimum vouchers per country
- 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
- **510** maximum vouchers per country
- **15** minimum vouchers per country
- 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

- 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 firstcome 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 and 2) Countries such as Bulgaria, Croatia, Ireland, Lithuania, Portugal and Slovenia have more than 50% of their municipalities among the winners of Call 1 or Call 2



### 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

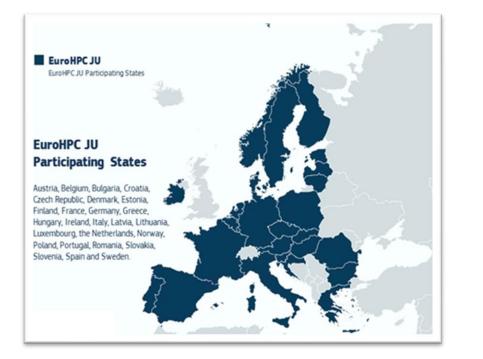
#### **Open questions:**

- 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?



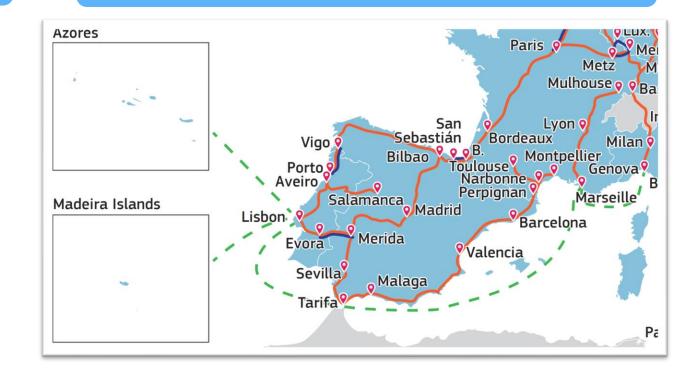
### Key international and cross-border HPC connectivity

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



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

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





### **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)



### 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)?



### **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)



### **Operational Digital Platforms**

#### Definition (Art 2(I))

 (I) "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-ofthe-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





### Thank you for your interest!

### To be continued...

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Commission

Have Your Say! #CEF2digital

Closing on 11<sup>th</sup> September 2019