

CEF Digital Programme - Information Day

19 January 2022, 9:30-13:30











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Welcome

Mateusz KUJAWA, Head of Sector

CEF Digital - HaDEA



Agenda

- Welcome
- Priorities of the Calls (topics):
 - 5G Corridors and 5G Coordination and Support Actions
 - 5G for Smart communities
 - Cloud federations and DNS
 - Digital Global Gateways
 - Operational digital platforms Programme Support Action
- Q&A

Break

- Evaluation Process and Award Criteria
- Preparing a Successful Proposal and Budget requirements
- Introduction to the Funding & Tenders Portal and Application Process
- Q&A







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CEF Digital Policy Context

Rita WEZENBEEK, Director

Connectivity

European Commission, DG CONNECT



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HaDEA



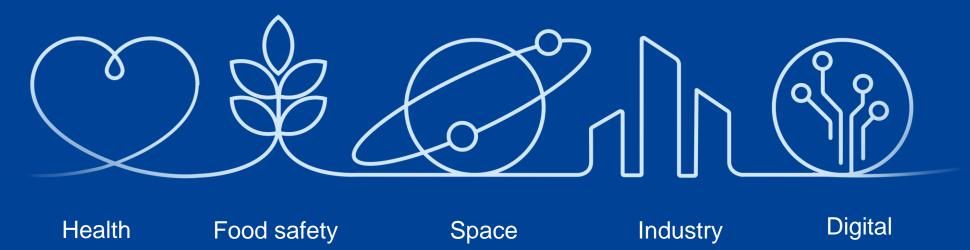
Hervé DUPUY, Head of Unit CEF Digital - HaDEA



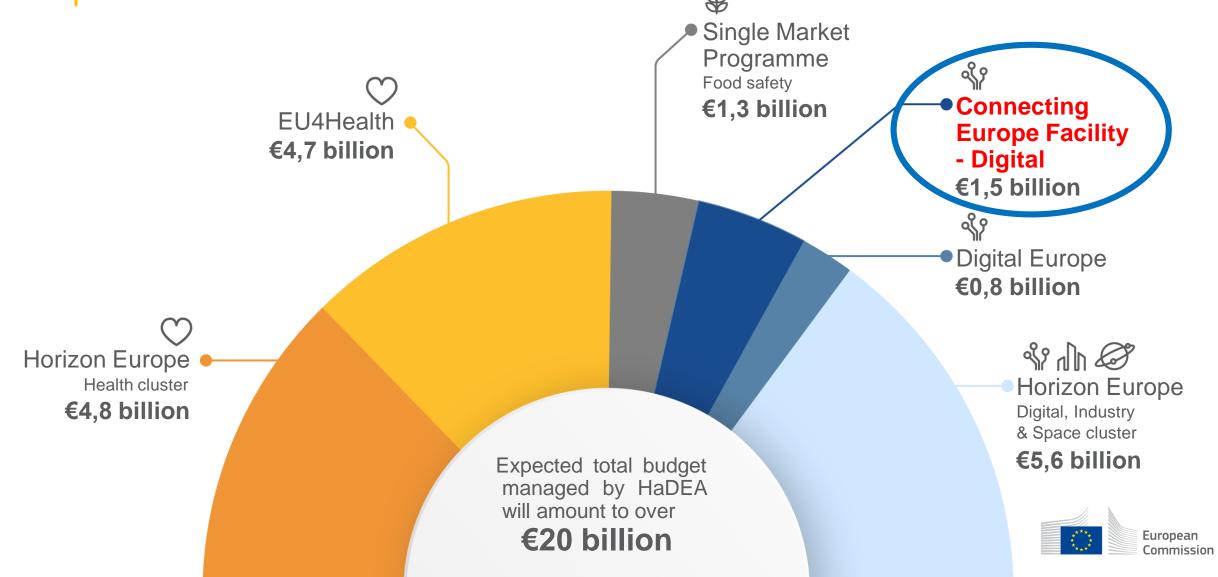
HaDEA – the European Health and Digital Executive Agency

"Boosting Europe by building, from earth to space, a healthy society, a digital economy and a competitive industry"

Programme sectors



HaDEA implements EU Programmes (2021-2027)



Overview of CEF-Digital calls 2021

Calls	Topics (reference numbers)
5G Coverage along Transport Corridors	CEF-DIG-2021-5GCORRIDORS-WORKS CEF-DIG-2021-5GCORRIDORS-STUDIES
5G for Smart Communities	CEF-DIG-2021-5GSMARTCOM-WORKS
Backbone networks for pan-European cloud federation	CEF-DIG-2021-DNS- WORKS CEF-DIG-2021-CLOUD-FED- WORKS CEF-DIG-2021-CLOUD-OTHER -STUDIES
Backbone connectivity for Digital Global Gateways	CEF-DIG-2021-GATEWAYS- WORKS CEF-DIG-2021-GATEWAYS- STUDIES
Coordination and Support Actions (CSA)	CEF-DIG-2021-TA- PLATFORMS CEF-DIG-2021-TA- 5GAGENDA CEF-DIG-2021-TA- 5GINTEGRA



Calls 2021 Timeline

Timetable and deadlines (indicative)		
Call opening:	12 January 2022	
Deadline for submission:	22 March 2022 – 17:00:00 CET (Brussels)	
Evaluation:	April - June 2022	
Evaluation results:	August 2022	
Grant Agreement signature:	November-December 2022	



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Priorities of the topics



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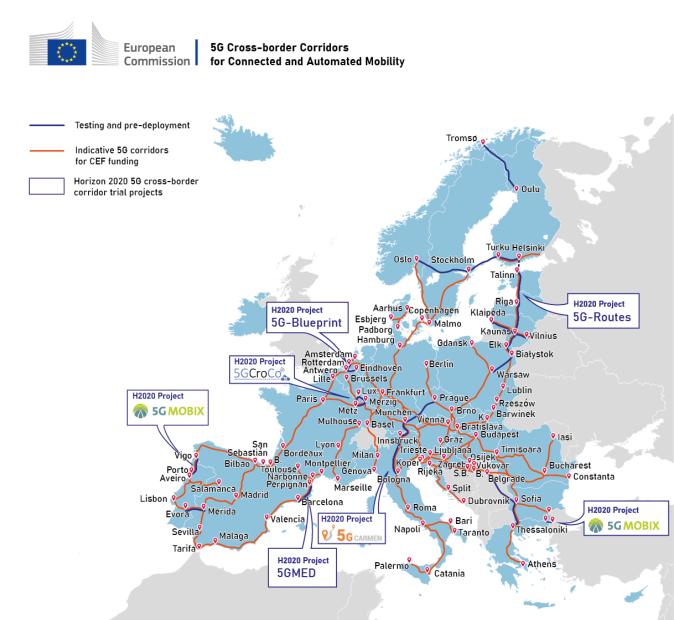
5G Coverage along Transport Corridors

Peter STUCKMANN
Head of Unit, Future Connectivity Systems
European Commission, DG Connect, Unit E1



Deployment of 5G Cross-Border Corridors

- Vision: Pan-EU 5G corridors for Connected and Automated Mobility & high value commercial services
- Private investment with public funding of crossborder and "challenge" areas
- CEF Digital: 26.000km transport paths along TEN-T networks, 49 intra-EU borders: Investment required: ~EUR 5,4 bn
- Integration of 5G corridors with Edge node infrastructure and European Federated Cloud
- Large-scale deployment using CEF Digital (~€1B for 5G Corridors)
- Blending or coordination with RRF, InvestEU and national programmes, Multi-Country Projects
- Horizon 2020: Large-scale cross-border trials projects (EUR 80M)



5G Corridors: Call Planning

CEF Digital 5G corridor deployment calendar										
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Early Wave	Call Q4-Q1		Deployment (CEF/RRF)							
1st big Wave	Call Q	(4-Q1	Studies							
			Call Q1-Q2	Deplo	yment (CEF	/RRF)				
2nd big Wave (TBC)			Call Q1-Q2	Studies						
				Call Q1-Q2	Dep	loyment (tb	oc)			
Last Wave (TBC)										

CEF Budget:

• 2021-2023: 346 million €

• 2024-2027: tbc



5G Corridors: Early and 1st Big waves, 2022

CEF Digital 5G Corridors					
Call	Budget Allocated	Publish Call*	Proposal Submission	Launch	
Early Wave					
Deployment	100.000.000 €	Jan-22	Mar-22	Q4 2022	
1st big Wave					
Inception Studies	6.000.000 €	Jan-22	Mar-22	Q4 2022	
Deployment	240.000.000 €	2023	2023	2024	
TOTAL	346.000.000 €				

- Inception Studies & early wave/deployment were launched as part of the same call on 01/2022
- 1st big wave calls to launch in 2023
- Work Programme was adopted on 12/2021
- CEF budget of 346 million € at up to 50% financing or approximately 692 million € including private co-funding

5G coverage along transport corridors

CEF-DIG-2021-5GCORRIDORS

Objectives

- Early wave of deployment actions for 5G systems along transport paths for connected and automated mobility (CAM) including safety and non-safety services
 - ✓ roads, rail, inland waterways, or multimodal
- Leverage the needed private investment in order to establish a full pan-European road and railway network of 5G corridors by the end of the CEF programme (2027)
- Results of preparatory works providing a basis for deployment plans are expected to be included in the proposal (some preparatory actions can still be included in the project)
- Studies with indicative budget of €600K (EU contribution €300K). Larger budgets possible, if justified (e.g. regrouping of several corridors, complementary RRF sections)

5G coverage along transport corridors

CEF-DIG-2021-5GCORRIDORS

Scope

- Investment actions in challenging areas where market forces alone will not deliver quality 5G
- Focus on providing such connectivity along key European transport paths including, but not limited to, the indicative list of 5G corridors in Annex V of CEF Regulation
- Priority on cross-border sections involving two or more Member States (50% co-funding rate)
- Sections (each side of the border) up to 15% of TEN-T sections in the relevant MS
- Exceptions for longer sections and smaller MS (market failure to be demonstrated)
- Public funding not to be used to meet coverage obligations (step change beyond obligations)
- Applicants may apply for grants for works including studies related to project costs covering the following categories:
 - ✓ Deployment of passive network elements including civil works, e.g. ducts, dark fibre, 5G radio station, mast and pylons
 - ✓ Deployment and installation of active network elements, e.g. antennae, storage and computing capabilities such as network controllers, routers, switch, exchanges, edge MEC/node etc.
 - ✓ Deployment and installation of specific track side devices (e.g. road, rail) for connected and automated mobility use cases, such as sensors, cameras etc. for traffic monitoring purposes, including connected road-side units
 - ✓ Preparatory works, including network planning

5G coverage along transport corridors

CEF-DIG-2021-5GCORRIDORS

Impact

- Move forward and accelerate large-scale deployment of 5G corridors to support the adoption of CAM, such as
 - ✓ Driving with higher levels of automation
 - ✓ Digitalisation of rail operations as well as other relevant modes of transport.
- Support the deployment of Future Rail Mobile Communication System (FRMCS) and trackside and associated on-board equipment related to critical automatic train control systems and applications (ETCS and/or ATO)
- Strengthen the social, economic, and territorial cohesion in the EU by addressing deployment gaps and removing capacity bottlenecks and technical barriers

Maximum Co-Funding Rates:

Outermost Regions: 70%

Works: 30%	Studies: 50%
Strong Cross-border Dimension: 50%	





5G Corridors: Requirements

- Uninterrupted coverage meeting service requirements for safety (CAM, ITS, FRMCS) and non-safety multi-service/multi-application 5G services
- Radio infrastructure should make use of 5G pioneer bands and, if appropriate, FMRCS and ITS bands
- Short range C-ITS (e.g. LTE-V2X and ITS-G5) in scope as complementary option (Compatibility/complementarity, interference considerations)
- Funding passive and/or active network elements including 5G edge computing facilities
- Integration with cloud/edge data infrastructures and European federated cloud infrastructure
- Infrastructure sharing, open access and/or access for CAM service providers
- Exploit synergies for services beyond the corridor, e.g. in villages, for socio-economic drivers
- Security declarations by participating entities are required for works. In addition, security guarantees approved by the Member States are required for works, studies and coordination support actions.

5G Corridors: Synergies Encouraged

- Sharing infrastructure (passive/active) between safety and non-safety related services
- Sharing network infrastructure between FRMCS and Gigabit Train:
 - Passive: e.g. backhauling, mast, pylons, co-location
 - Active: network slicing
- Sharing infrastructure between roads and rail where possible
- Integration with 5G nodes and European Federation of Cloud
- Synergies with CEF Transport
- Complementarity with national deployment projects, e.g. RRF, ESIF, Invest EU
- 5G SDA process (SNS JU): cooperation models
- Inception Studies may cover multiple corridors based on either location or transport mode



5G Corridors: Governance & Stakeholder Involvement

- Project consortia of at least 2 different undertakings and/or public bodies
- Typical consortia with 5-10 members, e.g. mobile network operator(s), tower companies, road operator(s) or rail infrastructure manager(s), service integrators, CAM service providers
- Access to transport paths and, if appropriate, to radio spectrum
- Long-term development and service provision beyond the CEF project
- Support/endorsement by Member States
- Coordination between neighbouring Member States



Support Action: 5G Strategic Deployment Agenda coordination

CEF-DIG-2021-TA

CEF-DIG-2021-TA-5GAGENDA

Objectives

 Coordinate the development of 5G Strategic Deployment Agendas on 5G for CAM in close cooperation with the Smart Networks and Services JU (deployment roadmaps, progress monitoring, project pipeline, cooperation models, regulation)

Activities

- Stakeholder engagement (SDA content and project pipeline)
- Best practice and consistency among projects
- Progress data gathering and reporting
- Liaison with regulators

Expected impact

Effective and consistent deployment of 5G corridors across the EU



Support Action: Integration of 5G corridors and 5G communities with edge computing and federated cloud facilities

CEF-DIG-2021-TA

CEF-DIG-2021-TA-5GINTEGRA

Objectives/Impact

- Accelerate the development of edge computing solutions as part of 5G corridors and 5G local communities and to ensure an integrated approach across programmes
- Interconnection of newly deployed 5G corridor sections and 5G infrastructure for local communities with edge computing facilities and federated cloud infrastructures
- Accompany CEF-funded 5G deployment projects during their edge node deployment and service platform integration phase in order to adopt the common concepts developed

Activities

- Concept development, proof of concept
- Outreach, engagement and advisory services for 5G Corridor and Community projects to integrate the developed solutions



Eric GAUDILLAT
Head of Sector, 5G Connectivity
European Commission, DG CONNECT, Unit B5



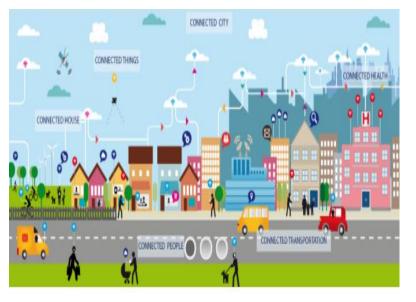
CEF-DIG-2021-5GSMARTCOM

Objectives

- Support the early deployment of 5G systems that enable innovative use-cases for services of general (economic) interest or public authorities
- Gather best practices and blueprints for replication co-funded under other programmes, including RRF
- CEF to co-fund up to 75% of the 5G infrastructure

Participants

- The owners of the funded 5G infrastructure: operators of the electronic communications network
- The providers of the use cases: public authorities or providers of services of general (economic) interest: for example in the health and education sectors





CEF-DIG-2021-5GSMARTCOM

Scope

- deployment of 5G infrastructure elements required by public authorities and SGI/SGEI providers to implement innovative use-cases
- Performance of 5G indispensable to implement these use cases and not already available/planned
- enable the concerned public authority or SGI/SGEI provider(s) to deliver new services or improve efficiency in existing services.
- Deployment of fibre backhaul capacity is not the major focus: expected to be available close-by (or with minor investment <10% of the total project)
- Costs for internet and software services not eligible

Security requirements

Declarations by all participating legal entities and security guarantees approved by the Member State in which they are established, on the basis of national law

See call text for details



CEF-DIG-2021-5GSMARTCOM

Impact

- Constitute a set of best practices and examples for replication co-funded under other programs, including RRF
- Together with the dedicated Support Action (see separate action in this call), create a community involved in 5G use cases and disseminate best practices
- Where necessary, projects will bundle the deployed 5G networks with a cloud-to-edge middleware stack to enable the use cases for the SEDs (see Digital Europe Programme)
- A Support Platform (see separate action in this call) will explore the possibilities for integrating 5G with cloud-to-edge



Maximum Co-Funding Rates:

Connecting socio-economic drivers: 75%



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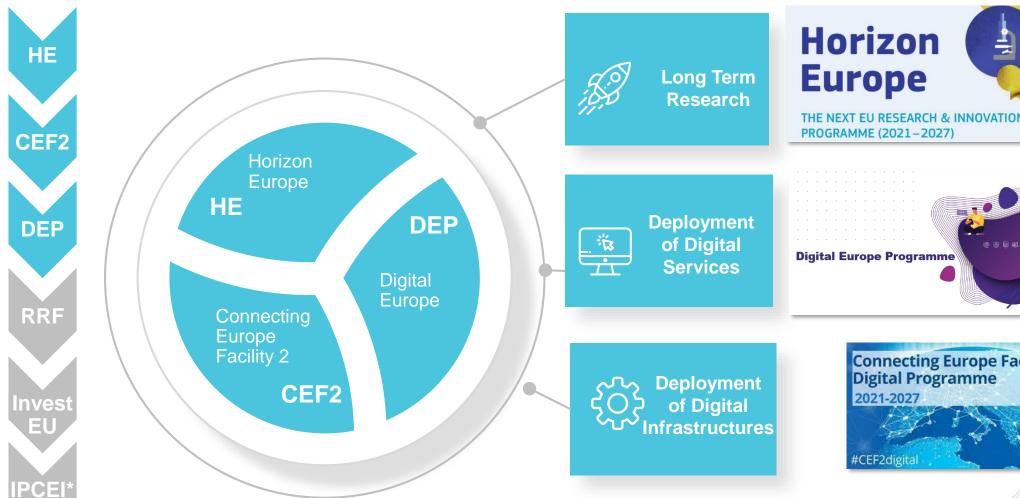


Backbone Networks for pan-European Cloud Federation

Manuel MATEO GOYET
Deputy Head of Unit, Cloud and Software
European Commission, DG CONNECT, Unit E2



EU funded programmes











European Investment Schemes on Cloud & Edge

HE

• Research and large scale-piloting on low power and ultra-secure **hybrid computing architectures**; Swarm & decentralised intelligence at the edge; (Meta-)operating systems for the edge; Cognitive cloud and AI-enabled computing continuum

CEF2

 Deployment of cross-border secure, interoperable and energy-efficient physical and virtual interconnections among cloud and edge infrastructures across the EU territory

DEP

 Large scale piloting and deployment of federated cloud-to-edge-based services; building of marketplace(s) and multi-usage, low-power and interoperable middleware platforms

RRF

 Development, testing, upgrade, retrofitting, interconnecting and deployment innovative, low power, secure cloud and edge capacities (infrastructure, middleware and services) across Member States + Multi-Country Projects

Invest

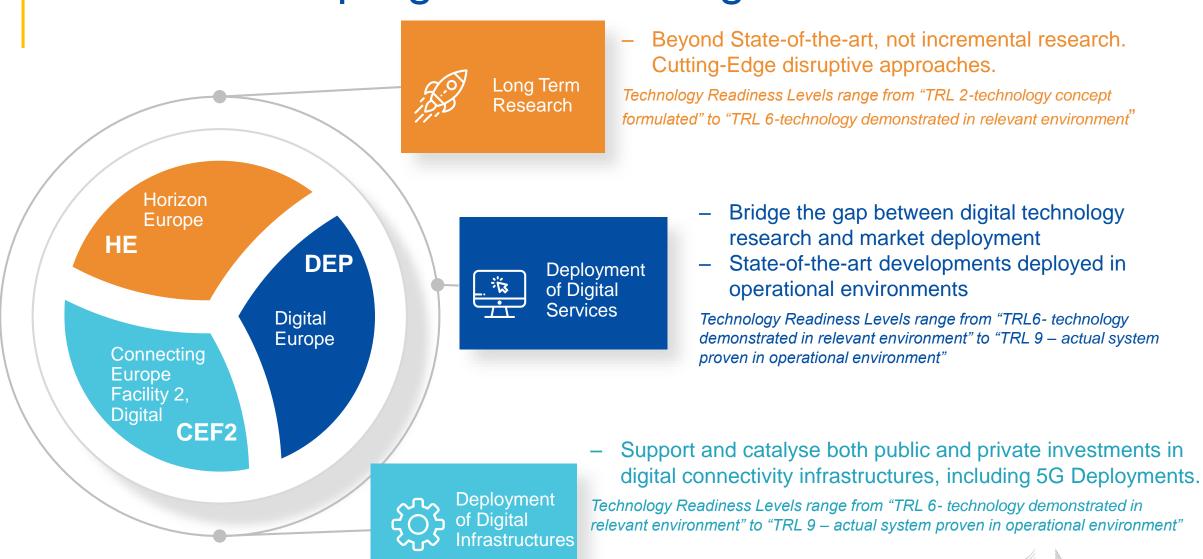
Loan, equity and guarantees for sustainable data processing infrastructures; research and development of the next generation
of low power software and; the deployment of looking forward edge computing services

IPCEI*

• European Commission Communication on important projects of common European interest (2014/C 188/02); *Subject to notified and approved state aid for a potential IPCEI on Next generation Cloud Infrastructure and Services.



EU actions & programmes – Edge-Cloud continuum



European

Overview of key EU actions & programmes

Horizon Europe HE **DEP Digital** Europe Connecting Europe Facility 2, **Digital** CEF₂

Open Source for Cloud based services Environments & tools for Decentralised Intelligence at edge

Future European Platforms for the Edge: Meta OS Cognitive Cloud Framework: Al-enabled Computing Continuum

Open Source for Cloud/ edge Digital Autonomy Piloting emerging Smart IoT Platforms and decentralised intelligence

Cognitive Computing Continuum: Intelligence & automation for more efficient data processing

....-0-0 efficiency

Long Term

Research

→ Cloud and Edge New hardware design, Energy

Deployment

of Digital

Services

→ Federated European

Marketplace (Edge 2

Cloud)



→ Advanced E2E Intelligent **Orchestration across** compute continuum.



→ Middleware for large cloud continuum ecosystems, e2e data pipelines



→ Pilots for **Smart IoT**

Smart middleware for a European cloud federation and for the European data spaces

First Call - Q4 2021

Marketplace for federated cloud-to-edge based services

Testing and Experimentation Facility for Edge Al

→ Reference Implementation for federated cloud (& edge)

→ Open source software stack

Second Call - Q1 - 2022

Smart middleware for a European cloud federation

Third Call - Q1 - 2022

Large-scale pilots for cloud-to-edge based service solutions

→ Large scale



deployments in application sectors



Deployment of Digital nfrastructures

2021-2023

5G corridors deployment, 5G deployment including when appropriate Edge **5G** for smart communities, 5G networks deployed with a cloud-to-edge middleware stack (from DEP) Backbone networks for pan-European cloud federations, development and deployment of crossborder and national cloud infrastructure interconnections at both the physical and functional levels Integration of 5G with edge computing and federated cloud facilities



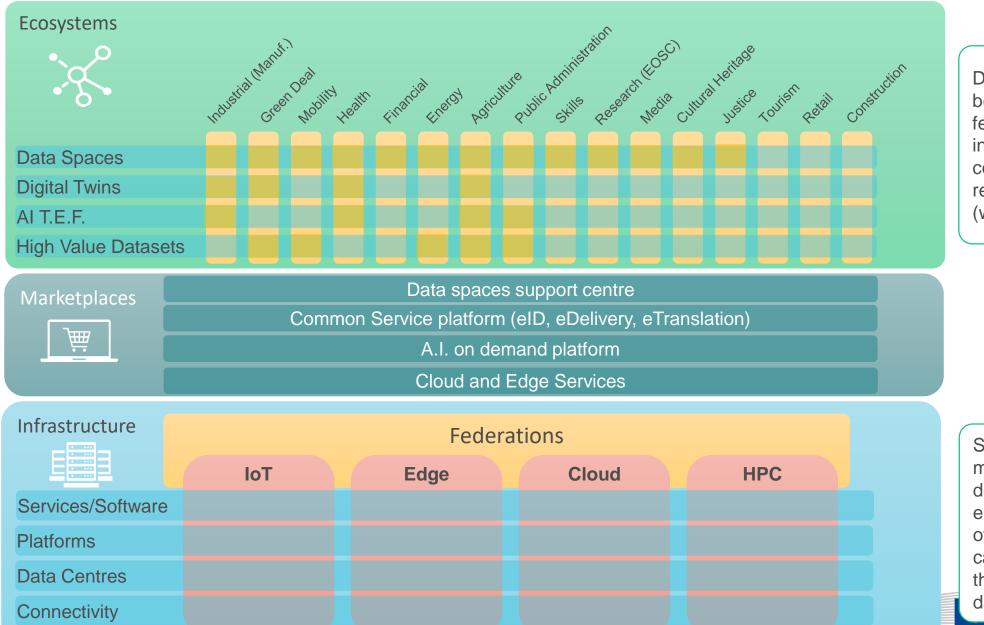
Density Edge and **Cloud deployments**





→ Interconnectivity for EU

Our vision: Cloud, Common European Data Spaces and Al



Standards, Interoperability & Portability
End-to-end cybersecurity, Trust, authentication, identification

Skills & Digital Innovation Hubs

Data Spaces will be built over federated data infrastructure with common technical requirements (where possible)

Services and middleware developed to enable a federation of cloud-to-edge capacities will be at the disposal of all data spaces

Backbone networks for pan-European cloud federation

CEF-DIG-2021-CLOUD

CEF-DIG-2021-CLOUD-FED-WORKS, CEF-DIG-2021-CLOUD-OTHER-STUDIES

Objectives

- Support the deployment of Gigabit links.
- Interconnection between Socio-economic drivers that are public administrations or public or private entities entrusted with the operation of SGIs or of SGEIs and backbone networks for cloud federations.
- Deployments will take place where existing infrastructure cannot satisfy proper seamless functioning of resources from different providers, and also where there is a lack of the necessary redundancy to guarantee the reliability and resilience of cloud connectivity that can ensure adequate, safe and secure connectivity for the Gigabit society.



Backbone networks for pan-European cloud federation

CEF-DIG-2021-CLOUD

CEF-DIG-2021-CLOUD-FED-WORKS, CEF-DIG-2021-CLOUD-OTHER-STUDIES

Scope

- New and significant upgrade of cloud interconnections
- Cross-border and/or national
- Links within MS:
 - (i) address a market failure which cannot be solved by regulatory measures
 - (ii) avoid crowding out private investments or unduly distorting competition
- Costs:
 - studies, works and equipment
 - physical and functional level

Security requirements

- Exclusion of non-EU controlled entities, under the Article 11.4 of the CEF Regulation 2021/1153 (ownership control questionnaire)
- Security declarations
- No security sensitive equipment or services deployed or used within the proposal will be procured from third country suppliers



Backbone networks for pan-European cloud federation

CEF-DIG-2021-CLOUD

CEF-DIG-2021-CLOUD-FED-WORKS, CEF-DIG-2021-CLOUD-OTHER-STUDIES

Impact

- a) support the digital transformation and modernisation of the public sector in Europe
- b) increased competitiveness and resilience of the EU computing industry
- c) technological autonomy in computing infrastructures / dataspaces
- d) roll-out of emerging technologies, including AI, IoT, HPC
- e) energy efficiency and sustainable large scale deployment of cloud-to-edge infrastructures.

Maximum Co-Funding Rates:

Outermost Regions: 70%

Works: 30%
Strong Cross-border Dimension: 50%

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Equipping existing backbone networks with high-performance and secure DNS resolution infrastructures

Rüdiger MARTIN

Policy Officer, Internet Governance

European Commission, DG CONNECT, Unit E3, Next-generation Internet



Equipping backbone networks with high-performance and secure DNS resolution infrastructures

CEF-DIG-2021-CLOUD

CEF-DIG-2021-CLOUD-DNS-WORKS

Objectives

- Deployment of a recursive European DNS resolver service infrastructure (DNS4EU) with very high reliability and protection against global cybersecurity threats and threats specific to the EU
- Initiative addresses vulnerability of DNS resolution process and hence overall internet resilience weaknesses - due to consolidation of DNS resolution in case of significant events
- Initiative addresses lack of significant EU investment hampering infrastructure development to detect and filter local cyber-threats with significant socio-economic impacts
- DNS4EU shall offer
 - High level of resilience
 - Global and EU-specific cybersecurity protection
 - Data protection and privacy according to EU rules
 - Processing of DNS resolution data in Europe and no monetization of personal data
- DNS4EU shall adhere to latest internet security and privacy standards and shall be widely discoverable and easy to configure



Equipping existing backbone networks with highperformance and secure DNS resolution infrastructures

CEF-DIG-2021-CLOUD

CEF-DIG-2021-CLOUD-DNS-WORKS

Scope – the proposal shall

- Meet requirements at user and service level regarding 1) customer base, 2) availability and service level, 3) accessibility, 4) discoverability, 5) premium and wholesale services, and 6) residential services.
- Comply with security and privacy requirements and standards regarding 7) security in terms of state-of-the-art protection against cybersecurity threats, 8) data processing, 9) internet standards, and 10) best practices
- Comply with EU regulation and applicable national regulations of its Member States regarding 11)
 data protection and privacy and 12) lawful filtering
- Ensure forward looking approach regarding 13) technology/innovation
- Regarding 14) governance/federated structure, federated and expandable as priority

Security requirements

- Exclusion of non-EU controlled entities, under the Article 11.4 of the CEF Regulation 2021/1153
- Security declarations
- No security sensitive equipment or services procured from third country suppliers



Equipping existing backbone networks with highperformance and secure DNS resolution infrastructures

CEF-DIG-2021-CLOUD

CEF-DIG-2021-CLOUD-DNS-WORKS

Impact

- 1. High-end alternative to existing dominant non-EU public resolvers, leading to more resilient, more secure and diversified DNS resolution offering for EU internet users
- 2. EU-Autonomy of DNS resolving, diminishing dependency on major public resolvers established outside the EU, reducing vulnerability to outages of these resolvers.
- 3. Complete safeguards for EU internet users regarding data protection and privacy handling according to EU rules.
- 4. Increased protection against malicious activities based on both global and local (EU) threat feeds and intelligence.
- 5. Testing and deploying innovative technologies to enhance internet access security and privacy.

Maximum Co-Funding Rates:

Works

Strong Cross-border Dimension: 50%







Backbone connectivity for Digital Global Gateways

Thomas KÜPPER ine Cable Systems

Policy Officer, Broadband and Submarine Cable Systems European Commission, DG CONNECT, Unit B5



CEF-DIG-2021-GATEWAYS

Objective

Support the deployment of strategic networks as part of the Digital Global Gateway Strategy of the EU. CEF Digital will support the deployment of backbone networks addressing connectivity needs, such as:

- (1) Connecting all **territories** of the EU including its **Outermost Regions**.
- (2) Supporting the specific needs of Member States which are **islands** themselves, or have islands as part of their territory.
- (3) Intermeshing backbones interconnecting major points of connectivity in the EU.
- (4) Addressing the specific needs of Overseas Countries and Territories in the EU.
- (5) Ensuring **international connectivity** to EU partners worldwide as a basis for European strategic autonomy.
- (6) Promoting **synergy** projects addressing other objectives of CEF Digital, including sector specific considerations encompassing the connectivity of large-scale digital capacities such as HPC or cloud.



CEF-DIG-2021-GATEWAYS

Scope

This call will support the deployment of backbone connectivity for routes **within**Member States, **between** Member States, and between the EU **and third countries**, including to remote territories where :

- (1) there is a lack of **redundancy**, or
- (2) existing infrastructure cannot satisfy **demand**, or
- (3) the users in the territories suffer from suboptimal **services** and **prices**.

Security requirements

- Exclusion of non-EU controlled entities (art. 11.4 CEF regulation).
- No security sensitive equipment or services will be procured from third country suppliers.
- For infrastructure connecting EU with third countries: exception for legal entities in that third country where their participation is indispensable for the achievement of the objectives and subject to security guarantees approved by the third country.



CEF-DIG-2021-GATEWAYS

Technology neutral call

Digital Global Gateways can be provided with the technology best suited including eg:

- Submarine Cable Systems,
- Satellite Infrastructure,
- Connectivity to internet exchange points, and
- Inter-Connection of Backbones with networks inside of the supported territories

What will be co-financed

- For works, total project costs required to construct and deliver the described networking solution for the foreseen system lifetime, from end to end, including cable landing station and connectivity towards them. Operating costs, and costs for the land ownership excluded.
- For **studies**, all preparatory work required prior to signing a contract with a supplier such as marine ground surveys for submarine cables, and the application for required permits.



CEF-DIG-2021-GATEWAYS

Expected Impact:

- benefits go beyond those directly related to supported projects
- contribute to bridging the digital divide,
- ensuring widespread access to gigabit networks for everybody in the EU and all businesses.

This connectivity infrastructure can cross-facilitate the implementation of other topics supported under CEF Digital, such as the

- take-up of 5G use cases, and
- the availability of HPC-related facilities, etc.

Maximum Co-Funding Rates:

Works: 30%

Strong Cross-border Dimension: 50%

Outermost Regions: 70%



Preparation of works for Operational Digital Platforms (ODPs)

Svetoslav MIHAYLOV
Policy Officer Internet of Things
European Commission, DG CONNECT, Unit E4



Preparation of works for Operational Digital Platforms (ODPs) ODPs are physical and virtual information communication.

CEF-DIG-2021-TACEF-DIG-2021-TA-PLATFORMS

ODPs are physical and virtual information communication technology resources, operating via the communication infrastructure, which support the flow, storage, processing and analysis of transport or energy infrastructure data, or both.

Objectives/Expected outcomes

- Support the EU environmental, energy and digitalization targets, by providing technologies and connectivity to enable a cyber-secure Internet of Energy and an optimised transport system along the major European paths.
- "Retro-fitting" the existing energy and/or transport infrastructures with the required cross-border digital infrastructure.
- Build on and integrate with existing and emerging European data, cloud and edge computing and connectivity infrastructures, in particular those supported in other parts of CEF Digital, the Digital Europe Programme, and Horizon Europe.
- Two-phase approach: a **Coordination and Support Action** (CSA) and **works project(s)** (in CEF Digital work programme 2024-27)



Preparation of works for Operational Digital Platforms (ODPs)

CEF-DIG-2021-TA

CEF-DIG-2021-TA-PLATFORMS

Scope/Activities

- Prepare the future works project(s) by identifying the most appropriate cases and delivering the building blocks (such as governance, detailed design, etc.) needed for immediate deployment within the works project(s).
- Four stages to be implemented within 27 months' period, as follows:
 - 1. **Exploratory study** to prepare the baseline and identify and shortlist lead use cases in energy, mobility or both (5 months);
 - 2. Feasibility study for six shortlisted cases (7 months);
 - 3. **Detailed preparations** for three shortlisted cases (9 months);
 - 4. Assistance to projects coming from the first call for works (6 months).

Consortium should be well **balanced** across the relevant stakeholder groups and covering the three CEF sectors i.e. **digital, transport and energy**

Indicative budget: EUR 4 Million





Security Summary



Security Requirements Summary

Security requirement	5G for Smart Communities	5G coverage for corridors	Digital Global Gateways	Cloud & DNS	CSA
Ownership control questionnaire			Works/Studies	Works/Studies	
Security declaration	Works	Works	Works	Works	
Security guarantees approved by the MS	Works	Works/Studies			All
Security guarantees approved by the third country			Works/Studies		
Application Form Part B - Digital security section (4.3)	Works	Works	Works	Works	





Questions & Answers

