



Connecting Europe Facility (CEF)

Call for proposals

CEF Digital - 5G coverage along transport corridors

CEF-DIG-2023-5GCORRIDORS

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HEALTH AND DIGITAL EXECUTIVE AGENCY (HaDEA)

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CALL FOR PROPOSALS

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0. Introduction

This is a call for proposals for EU **action grants** in the field of “5G Corridors” under the Digital strand of the **Connecting Europe Facility (CEF)**.

The regulatory framework for this EU Funding Programme is set out in:

- Regulation 2018/1046 ([EU Financial Regulation](#))
- the basic act ([CEF Regulation 2021/1153](#)¹).

The call is launched in accordance with the [2021-2025 Work Programme](#)² and will be managed by the Health and Digital Executive Agency (HaDEA) (hereafter ‘the Agency’).

The call covers the following **topics**:

- **CEF-DIG-2023-5GCORRIDORS-WORKS – 5G coverage along transport corridors - Works**
- **CEF-DIG-2023-5GCORRIDORS-STUDIES – 5G coverage along transport corridors - Studies**

Each project application under the call must address only one of these topics. Applicants wishing to apply for more than one topic, must submit a separate proposal under each topic.

NOTE: The term ‘project’ used in the call documentation is synonym to the term ‘action’ used in the CEF Regulation 2021/1153.

¹ Regulation (EU) 2021/1153 of the European Parliament and of the Council of 7 July 2021 establishing the Connecting Europe Facility (OJ L 249, 14.7.2021, p. 38–81).

² Commission Implementing Decision C(2021) 9463 final of 16 December 2021 concerning the adoption of the work programme for 2021-2023 and the financing decision for the implementation of the Connecting Europe Facility (CEF) as amended on 19 April 2023.

We invite you to read the **call documentation** on the Funding & Tenders Portal Topic page carefully, and in particular this Call Document, the Model Grant Agreement, the [EU Funding & Tenders Portal Online Manual](#) and the [EU Grants AGA — Annotated Grant Agreement](#).

These documents provide clarification and answers to questions you may have when preparing your application:

- the [Call Document](#) outlines the:
 - background, objectives, scope, activities that can be funded and the expected results (sections 1 and 2)
 - timetable and available budget (sections 3 and 4)
 - admissibility and eligibility conditions (including mandatory documents; sections 5 and 6)
 - criteria for financial and operational capacity and exclusion (section 7)
 - evaluation and award procedure (section 8)
 - award criteria (section 9)
 - legal and financial set-up of the Grant Agreements (section 10)
 - how to submit an application (section 11)
- the [Online Manual](#) outlines the:
 - procedures to register and submit proposals online via the EU Funding & Tenders Portal ('Portal')
 - recommendations for the preparation of the application
- the [AGA — Annotated Grant Agreement](#) contains:
 - detailed annotations on all the provisions in the Grant Agreement the successful applicants will have to sign in order to obtain the grant (*including cost eligibility, payment schedule, accessory obligations, etc.*).

1. Background

In 2016 the European Commission's **5G Action plan** for Europe emphasised that further efforts were needed to achieve uninterrupted coverage along the major transport corridors across Europe with 5G connectivity infrastructure³.

The objective of 5G corridor deployment in support of **higher levels of automation** was also reaffirmed by the Commission in its sustainable and smart mobility strategy of December 2020⁴.

³ COM(2016)588 final, "5G for Europe: An Action Plan"

⁴ "[Sustainable and smart mobility strategy: putting European transport on track for future, COM \(2020\) 789 final](#)"

In December 2022 the European Parliament and Council adopted the 2030 Policy Programme “Path to the Digital Decade”⁵, which endorses the digital targets set by the Commission in its “Digital Compass”⁶. With respect to **digital infrastructures**, the proposed level of ambition is that **all European households be covered by a Gigabit network, with all populated areas covered by 5G.**

The Digital Decade Policy Programme identifies a dedicated **multi-country project** (MCP) aiming at the development of pan-European deployment of 5G corridors. This MPC is coordinated based on guidance of the Smart Networks and Services Joint Undertaking (SNS JU).

5G corridors are defined in Article 2 (o) of the CEF Regulation 2021/1153 as **transport paths, road, railway or inland waterway, fully covered with digital connectivity infrastructure and in particular 5G systems, enabling the uninterrupted provision of digital services such as in the area of connected and automated mobility, similar smart mobility services for railways or digital connectivity on inland waterways.** 5G corridors comprise 5G systems – including, if appropriate, 5G edge computing facilities - that meet the very stringent service requirements of transport safety and digital rail operations, in particular in terms of ultra-high reliability, security, low latency, and high throughput. More specifically, they should make these service characteristics available for advanced transport and smart logistics applications.

Investments in 5G corridors will entail a solid foundation for future digital mobility services and applications. In particular, **5G connectivity infrastructure is a key enabler for connected and automated mobility (CAM) including safety and non-safety services.** The latter includes a broad range of digital services for the vehicle, the driver, the passengers, and other relevant players, as well as connectivity services paving the way for driving with high levels of automation.

In line with Article 9.4 c) of the CEF Regulation 2021/1153, this call supports actions implementing the **uninterrupted coverage with 5G systems of all major European transport paths, based on the TEN-T corridors**, as in the indicative list, Part V, point 3, of the Annex.

As compared to today’s wide area deployment of mobile networks, **investment in 5G corridors is expected to be challenging, as the prospects for return on investments are not expected to be immediate.** It will entail uninterrupted coverage in a high-speed mobility scenario and, where necessary, a dense network to meet challenging performance requirements for digital services such as CAM. This will require the installation of a large number of additional network elements equipped with 5G capabilities on existing or new sites, including, if appropriate, 5G edge computing facilities, with the view to densify the radio coverage along the transport paths. It will equally require backhaul networks connected to the public telecom network and, if appropriate, interconnection to federated cloud and edge computing infrastructures and access to electricity supply.

⁵ Decision (EU) 2022/2481 of the European Parliament and of the Council establishing the “Digital Decade Policy Programme 2030”, of 14 December 2022

⁶ “2030 Digital Compass: the European way for the Digital Decade”, Communication from the European Commission of 9 March 2021, COM(2021)118 final

According to a 2023 Commission study⁷, the overall investment required to cover the comprehensive TEN-T corridors (road, rail and waterways totalling 235 000 km) with 5G radio stations in the 3.6 GHz band – enabling future-proof network performances – corresponds to an order of magnitude comprised between EUR 26 billion and EUR 79 billion, depending on the deployment mode and level of synergies factored in.

2. Objectives — Scope (including digital security requirements) — Expected impact

2.1. CEF-DIG-2023-5GCORRIDORS-WORKS – 5G coverage along transport corridors – Works

Objectives

The overall goal of this call is to **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).

More specifically, the objective is to fund the first larger wave of deployment projects deriving from inception studies co-funded in the first call (CEF-DIG-2021-5GCORRIDORS-STUDIES) or building on other types of studies or based on results generated by on-going R&I 5G cross-border corridor trial projects conducted across the EU under Horizon 2020⁸.

Projects funded under this call are expected to:

- **Deploy 5G systems along transport paths** for enabling the development of **Connected and Automated Mobility, including automated rail and waterway operations**, with the overall view to contribute to the green and digital transition of the EU.
- Reaching uninterrupted coverage meeting service requirements for Connected and Automated Mobility (**CAM**), Intelligent Transport Systems (**ITS**) and Future Railway Mobile Communications Systems (**FRMCS**), River Information Systems (**RIS**) and also for **multi-service/multi-application 5G services** along European transport paths, including high-value commercial services (e.g. infotainment, mobile office).
- The focus is on providing such connectivity along key European transport paths including, but not limited to, the indicative list of 5G corridors in part V of the Annex to the CEF Regulation. In this sense, projects may encompass **roads, rail, and inland waterways**, and if appropriate in **multimodal combination with other modes of transport** (including for example use cases for smart logistics in multimodal logistic platforms and ports, etc).

The priority of this call will be to support investment in **cross-border sections** of a Member State with one or more Member States or associated countries with higher funding rate (see section 10).

Exceptionally, when there is no terrestrial border with another Member State, 5G corridor deployment projects crossing the border of a third country or terminating at a port with maritime connections to other EU Member States are also within the scope

⁷ [Investment and funding needs for the Digital Decade connectivity targets | Shaping Europe's digital future \(europa.eu\)](https://european-council.europa.eu/media/eap/123456789/attachmentData/binary/123456789), Commission study conducted by WIK, July 2023

⁸ From R&I towards actual deployment: update on 5G trials and pilots for CAM: [5GPPP 5G4CAM brochure2023 web.pdf \(5g-ppp.eu\)](https://www.5gpp.eu/5G4CAM_brochure2023_web.pdf)

of this call. In such cases a strong cross-border dimension needs to be demonstrated and CEF co-funding will be limited to the corridor sections located in the eligible country/countries.

Scope

This topic targets actions that support investments in **challenging areas, where market forces alone will not be capable of delivering 5G services with the required quality of service.**

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 stations, towers, masts and/or pylons.
- Deployment and installation of active network elements, e.g., antennae, storage and computing capabilities such as network controllers, routers, switches, exchanges, edge MEC/node etc.
- Deployment and installation of specific track side devices (e.g., road, rail) for CAM use cases, such as sensors, cameras etc. for traffic monitoring purposes, including connected road-side units.
- Studies for preparatory works, such as network planning, to be deployed as part of proposed works within the same application.

The 5G connectivity infrastructure deployment proposed for funding under this call may encompass both passive and active network elements along transport paths.

In the case of passive network infrastructure deployment projects consisting mainly of fiber backhauling, the proposal should clearly demonstrate **the concrete plans for its use in the context of 5G infrastructure and services**, in particular with regard to the installation of the necessary equipment and associated facilities enabling the interconnection with points of presence and points of access to 5G stations and other relevant network elements (e.g., edge nodes).

Proposals must **not cover more than 15% of the total length of all the TEN-T comprehensive corridors of the same category (road, rail or waterways)⁹ per Member State** concerned by the proposal and other projects funded by the CEF Digital programme.

In the presence of a demonstrated market failure¹⁰, longer cross-border sections (i.e., beyond the above mentioned 15% threshold), as well as additional sections located inside of a Member State territory, could be considered. This possibility may be particularly relevant in the case of Member States where the length of TEN-T comprehensive corridors is limited. The need to justify the presence of a market failure - when exceeding the 15% threshold - does not apply to proposals designed as market-conform interventions¹¹.

⁹ For indications of TEN-T corridor length consult table 3-11, page 25 of the study [Investment and funding needs for the Digital Decade connectivity targets | Shaping Europe's digital future \(europa.eu\)](#), Commission study conducted by WIK, July 2023.

¹⁰ To demonstrate the presence of a market failure the proposal must justify that no 5G infrastructure, present or credibly planned, is capable of providing an uninterrupted mobile coverage suitable for CAM services.

¹¹ See section 4.2 of the Commission notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union (OJ C262, 19.07.2006, p.1.

Actions to be funded under this call must **go beyond any coverage obligations applicable to mobile network operators or spectrum right holders that arise out of spectrum licence conditions**. The proposal must include a declaration by all mobile network operators involved that the public funding of the CEF intervention will not be used for the purpose of the fulfilment of any relevant coverage obligation in the concerned member state(s) (see section 5 on Admissibility and documents).

When coverage obligations foresee the deployment of mobile connectivity along any sections of transport paths included in the proposal, but such coverage obligations do not foresee a quality of service sufficient to support the uninterrupted mobile coverage suitable for CAM services (such as data capacities offered per vehicle, speeds, latency, or other service enablers), the proposal could cover the upgrade of the infrastructures foreseen under the coverage obligations. In these cases CEF Digital co-funding will be strictly limited to the amount needed for such upgrade. This must be clearly explained and justified in the Application form Part B.

Cross-border sections that are complementary to national 5G corridor sections already planned for deployment by the private sector or identified under RRF or other national programmes in line with state aid rules are particularly encouraged, given their potential impact when deployed in synergy.

Projects should aim at **delivering uninterrupted coverage over the whole range of the corridor section thus ensuring service continuity in high-quality connectivity provision** - taking into account expected traffic demand along the different parts of the section - suitable to provide a broad range of 5G and, where appropriate (i.e., focusing on hotspots e.g., traffic junctions, roadworks, etc.), complementary safety-related services based on existing direct short range communication technologies, such as 4G LTE-V2X and ITS-G5 as well as their successors, compatible with existing deployment and supporting complementarity between existing and future infrastructure deployments.

The infrastructure in actions to be funded under this call should make use, or enable the use, of at least one **5G pioneer band (700 MHz, 3.6 GHz, 26 GHz) and, if appropriate, the 5.9 GHz ITS band and the 900 MHz and 1900 MHz FRMCS bands**¹². If 5G radio-communication technologies are used along the corridor, they should be based on the latest suitable 5G specifications made available by 3GPP and furthermore be able to integrate upgrades when available. The infrastructure should support advanced service features such as quality of service guarantees enabled by 5G edge computing facilities and facilities allowing for 5G network slicing.

Proposals should demonstrate that **interference issues with other C-ITS services using the 5.9 GHz ITS band are analysed and adequately addressed in the project**. Particular attention should be paid to ensuring continuity of legacy services and in particular continued functioning of safety-related services.

The corridor should incorporate solutions to integrate long-range and, if appropriate, short-range communication technologies and support infrastructures. The choice of these solutions will have to take into consideration the level of complementarity of both technologies, as well as efficiencies that may impact deployment costs, network performance, including quality of service, as well as scope and degree of innovation in the use cases enabled.

¹² Commission Implementing Decision (EU) 2021/1730 of 28 September 2021 on the harmonised use of the paired frequency bands 874,4-880,0 MHz and 919,4-925,0 MHz and of the unpaired frequency band 1900-1910 MHz for Railway Mobile Radio (OJ L 346, 30.9.2021, p.1).

Infrastructures deployed under this call can also be used for services beyond the transport paths, e.g., in areas surrounding the corridor, including populated areas or where socio-economic drivers¹³ are located. In these cases, market failure needs to be demonstrated.

The quality of the transport infrastructure supported by the project must represent a substantial improvement in comparison to the existing and/or planned infrastructure in the sections concerned.

The **key parameters** for describing the project, as a result of CEF Digital support under this call, will be:

- the aggregate length of the corridor sections covered by 5G;
- the spectrum bands enabled along the sections;
- the inter-radio site distance;
- the availability of various service features along transport routes;
- as well as the available network performance such as data rate and latency for each vehicle.

Proposals should indicate these parameters in Application form part C (see section 5 on admissibility and documents).

To increase the efficient use of the funds provided under this programme, **sharing models in both passive and/or active infrastructures is encouraged** in accordance with competition rules and the European Electronic Communications Code¹⁴. Sharing of passive and/or active network equipment (e.g., through a neutral host model) should aim at substantially reducing network deployment costs and at the same time facilitating energy efficient use of resources when deploying and operating 5G infrastructure. In addition, wherever possible, existing infrastructure such as ducts, fibre, equipment shelters, power supply, and utility poles should be reused.

Any arrangements for network sharing options should be clearly defined in the proposal, as well as the functional and operational relationship(s) between the different participants in the value chain for the provision of digital services throughout the 5G corridor, including where appropriate with owners of 5G spectrum band rights that are not members of a consortium.

Proposals should include reassurance as to the operation of the service beyond the specific sections supported by CEF, in view of the long-term development of the more extensive pan-European corridor network.

Proposals should define post-project ownership and describe the mechanism(s) set in place for long term cooperation and sustainability. A commitment to maintain the

¹³ As stated in the CEF Regulation 2021/1153, "socio-economic drivers" (SED) means entities which by their mission, nature or location can directly or indirectly generate important socio-economic benefits for citizens, business and local communities located in their surrounding territory, or in their area of influence. For instance, schools, universities, libraries, local, regional or national administrations, main providers of public services, hospitals and medical centres, transport hubs and digitally intensive enterprises are entities and places that can influence important socio-economic developments in the areas in which they are located, including rural and sparsely populated areas.

¹⁴ Dir. (EU) 2018/1972 of the European Parliament and the Council of 11 Dec. 2018 establishing the European Electronic Communications Code

infrastructure beyond the lifetime of the project should be demonstrated. In this sense, proposals should demonstrate how the infrastructure is intended to be made available for CAM service providers or other users inside or outside the consortium, e.g., providing access on a non-discriminatory basis to all operators that hold relevant spectrum licenses in the territory concerned, while keeping in mind the respective levels of risk undertaken.

Proposals should also include a plan to enable uninterrupted service beyond the cross-border sections funded. Such a plan should include the same security conditions that apply to the CEF-funded project.

Applicants should demonstrate that they have access to relevant sites or rights of way along transport paths and relevant spectrum (in case of active infrastructure, either directly or contractually through service providers). Land purchase is not in the scope of this call.

Specific measures addressing green policy objectives, in particular in terms of reducing the carbon footprint (such as energy power supply for the 5G radio sites coming from renewable sources), are encouraged.

Proposals funded under this topic may include synergetic (ancillary) elements relating to another sector of the CEF programme, i.e., energy and transport, if these synergetic elements allow to significantly improve the socio-economic, climate or environmental benefits of the action. CEF co-funding may be provided as long as the cost of these synergetic elements does not exceed 20% of the total eligible costs of the action.

In order to accelerate the **development of edge computing solutions as part of 5G corridors**, proposals should foresee activities to develop concepts and facilities for the interconnection of the newly deployed 5G corridor sections with edge computing facilities and federated cloud infrastructures, as well as relevant operational digital platforms funded under CEF Digital and Digital Europe. For this purpose cooperation with the Programme Coordination and Support Action Integration of 5G with edge computing and federated cloud facilities, which accompanies the 5G corridors and 5G for smart communities deployment projects should be foreseen.

Proposals should foresee **cooperation with the “GUIDE” project¹⁵**, which supports the SNS JU *5G Strategic Deployment Agenda* and provides strategic guidance to 5G Corridor deployment in Europe. GUIDE is also in charge of facilitating exchange of best practices and community building to help develop the CEF Digital project pipeline even further.

Cooperation with the Coordinated and Support Actions must be included as part of Project Management work packages, with the corresponding estimated costs.

Proposals must be submitted by consortia composed of at least two different undertakings and/or public bodies which will be taking responsibilities as regards ownership, operation and use after the project. The participation of the following actors as part of the consortium is encouraged:

- mobile network operators
- tower companies
- telecom backhaul operators
- road operators

¹⁵ A Coordination and Support Action funded under CEF Digital 5G Corridors, Call 1

- rail infrastructure managers
- original equipment manufacturers (OEMs), e.g., vehicle manufacturers
- mobility service providers (such as innovative solutions providers for traffic management and intelligent transport systems)

The consortium may also include public authorities in the fields of mobility and transport.

Each proposal should be supported by the relevant competent authorities involved in the deployment of 5G network infrastructure along a transport path on the two sides of the border, at national and/or regional and/or local levels. This support may be in the form of administrative letters, letters of intent, memoranda of understanding, or similar support documents.

In case of co-funding by national funds (i.e., Cohesion Funds and the Recovery and Resilience Facility - RRF), State aid rules within the meaning of Article 107(1) TFEU apply (see section 10 of the Work Programme for details).

Digital security requirements

All the proposals submitted under this topic must include security declarations by participating entities, which confirm and demonstrate that the network technologies and equipment (including software and services) funded on the basis of the programme comply with security requirements as specified in these call conditions, in accordance with the applicable EU law, national law, and EU guidance on cybersecurity¹⁶.

All participating legal entities must also provide security guarantees approved by the Member State¹⁷ (or by the respective authorities of the associated country or third country in case of exceptional funding as described in section 6. Eligibility) in which they are established, on the basis of national law.

These guarantees, will certify that the legal entity:

- a) Exercises full control over its corporate structure and decision-making process in a manner that does not restrain or restrict in any way its ability to perform and complete the action and is not subject to foreign jurisdiction obligations that may undermine the security of the Union;
- b) Effectively prevents access by non-eligible third countries or by non-eligible third country entities to classified and non-classified sensitive information relating to the action; and

¹⁶ Such as: the Commission Recommendation (EU) 2019/534 of 26 March 2019 Cybersecurity of 5G networks, C/2019/2335; the Report on EU Coordinated Risk Assessment of the Cybersecurity of 5G Networks of 9 October, 2019; the Council Conclusions on the Significance of 5G to the European Economy and the Need to Mitigate Security Risks Linked to 5G of 3 December, 2019; the Cybersecurity of 5G networks - EU Toolbox of Risk Mitigating Measures of 29 January, 2020; COM(2020)50 of 29 January 2020 on Secure 5G deployment in the EU – implementing the toolbox; and [Communication on implementing the 5G cybersecurity Toolbox C\(2023\)4049 of 15 June 2023](#).

¹⁷ The approval can be provided in the context of Art 11.6, which says: "To be eligible, proposals shall be submitted:(a) by one or more Member States; or (b) with the agreement of the Member States concerned, by international organisations, joint undertakings, or by public or private undertakings or bodies, including regional or local authorities. If the Member State concerned does not agree with a submission under point (b) of the first subparagraph, it shall communicate that information accordingly."

c) Ensures that the results of the CEF funded action shall remain within the beneficiary/beneficiaries and shall not be subject to control or restrictions by non-eligible third countries or other non-eligible third country entities during the action and for three years after its completion, and

d) The involved legal entity fulfils the strictest cybersecurity requirements imposed by national law, on the basis of the 5G toolbox and relevant EU law, of all the Member States where the deployed infrastructure is located¹⁸.

Proposals for this topic, in the digital security section in the application form, must address the following risk scenarios and mitigating measures as described in the [5G networks EU Toolbox of risk mitigating measures](#):

- involvement of high risk suppliers (as defined in the [EU coordinated risk assessment on cybersecurity of 5G networks](#) and addressed by the [Commission's communication on the implementation of the 5G cybersecurity toolbox](#)); restrictions applied against such suppliers for critical and sensitive key assets and measures to avoid dependency on such high risk suppliers
- measures to promote supply chain resilience and strategic autonomy (in line with the [5G networks EU Toolbox of risk mitigating measures](#))
- security requirements for your network operators (*e.g. strict access controls, rules on secure operation and monitoring, limitations on outsourcing of specific functions, etc.*)
- measures adopted to prevent unsolicited transfer to, or access by, third parties of the data (personal or non-personal) stored or transported in the context of the project

Based on the security declarations in the proposals, as well as the evaluation carried out by independent experts, the Commission or funding body, where appropriate, may carry out a follow-up assessment of the fulfilment of the security conditions in the declaration, including as regards beneficiaries' suppliers and sub-contractors. Funding for actions, which do not comply with the conditions related to security, may be suspended, terminated, or reduced at any time in accordance with the Financial Regulation.

For further background on security requirements, please see sections 8.2, 8.3 and 8.4 as well as section 2.2 (paragraph "Strengthen cybersecurity and resilience") and section 3.1.3 of the CEF Digital Work Programme.

Expected impact

CEF Digital funding is expected to move forward and accelerate large-scale deployment of 5G corridors to support the adoption of CAM, including driving with higher levels of automation and the digitalisation of rail operations as well as other relevant modes of transport. Funding may also support the deployment of Future Rail Mobile Communication System (FRMCS) and trackside and associated on-board

¹⁸ In case of third countries participation, the security guarantees approved by the respective third country will exclusively certify that the involved legal entity fulfils the strictest cybersecurity requirements imposed by national law, on the basis of the 5G toolbox.

equipment related to critical automatic train control systems and applications (ETCS and/or ATO).

By closing the deployment gaps, removing capacity bottlenecks and technical barriers, and ensuring service continuity across the border, the deployment of 5G corridors would contribute to strengthening the social, economic, and territorial cohesion in the EU.

2.2. CEF-DIG-2021-5GCORRIDORS-STUDIES – 5G coverage along transport corridors - Studies

Objectives

During the last decade large-scale trials for testing, demonstration, and validation purposes have been conducted at different locations across Europe, with the support of European and national/local public funding.

Inception studies will be funded under this call, in order to prepare the actual works for the next big waves of deployment to be launched after the conclusion of the studies. Another call for deployment is planned for 2024.

Individual studies covering several deployment projects (e.g. in the same geographical area or encompassing several transport modes) are encouraged, if relevant.

Projects funded under this call are expected to:

- Cover **preparatory actions (technical for network architecture, planning and location; cost-benefit analysis; business models, etc)** for subsequent deployment projects of 5G systems enabling the development of Connected and Automated Mobility, including automated rail and waterway operations, with the overall view to contribute to the green and digital transition of the EU
- Aim at future deployment reaching uninterrupted coverage meeting service requirements for Connected and Automated Mobility (**CAM**), Intelligent Transport Systems (**ITS**) and Future Railway Mobile Communications Systems (**FRMCS**), River Information Systems (**RIS**) and also for multi-service/multi-application 5G services along European transport paths, including high-value commercial services (e.g. infotainment, mobile office)
- Focus on providing such connectivity along key European transport paths including, but not limited to, the indicative list of 5G corridors in part V of the Annex to the CEF Regulation. In this sense, projects may encompass **roads, rail, and inland waterways**, and if appropriate in combination with **multimodal transport** for example exploring use cases for smart logistics in multimodal logistic platforms and ports, etc.)

The priority of this call will be to support investment in **cross-border sections** of a Member State with one or more Member States or associated countries with higher funding rate (see section 10).

Exceptionally, when there is no terrestrial border with a Member State, 5G corridor deployment projects crossing the border of a third country or terminating at a port with maritime connections to other EU Member States are also within the scope of this call. In such cases a strong cross-border dimension needs to be demonstrated and CEF co-funding will be limited to the corridor sections located in the eligible country/countries.

Scope

This topic targets preparatory actions in view of foreseen deployment projects that support investments in challenging areas, where market forces alone will not deliver 5G services with the necessary quality of service.

Combining several deployment projects for the same or different calls, e.g., combined by region, is encouraged in this call.

The studies should deliver the following elements:

- **Location** of the corridor, including the different cross-border sections
- Full **network planning** including the spectrum bands used or enabled
- **Detailed definition of use cases and service requirements** along the corridor allowing for business continuity across borders
- Concrete deliverables enabling to specify and financially quantify the investment required for infrastructure deployment, including coverage and service capabilities, use of existing infrastructure (backhauling including fibre, power, buildings and other constructions for co-location, ground space and other associated facilities and services)
- A **detailed plan on the proposed means deployed to enable uninterrupted service provision** along the funded section of corridors, where relevant, the supporting coordination mechanisms/arrangements, in particular regarding spectrum management and numbering. This includes a description of the scenario(s) and processes to guarantee a network hand-over meeting targeted CAM service requirements
- **Cost calculation and a cost-benefit analysis** to identify economically viable and non-viable sections of the corridor where CEF-funding of 5G connectivity infrastructure deployment would be needed and justified according to the guidance set forth by the Commission in its Work Programme
- Timeline of the work plan for deployment of subsequent works (finalisation of network planning, permit requests, preparation of works, works, testing, service launch)
- **Network upgrade plans** according to an evolutionary path enabling a densification of radio networks that would allow moving towards higher levels of automation, if possible up to full automation (e.g., level 5 in automotive)
- **Definition of cooperation model(s)** between the different members of the consortium outlining the roles and responsibilities of each involved party in the deployment project, including financing, ownership, infrastructure deployment,

network sharing agreements – if any, network operations and commercial service provision

- Identification of financing solutions for subsequent phases (based on the roadmap described above) possibly using a mix of grants and loans, e.g., under a potential CEF Digital blending facility

The corridors that are subject to the study should meet the following requirements:

- The infrastructure under study should **deliver uninterrupted coverage over the whole range of the corridor section thus ensuring high-quality connectivity** - depending on the expected traffic demand along the different parts of the section - suitable to provide a broad range of 5G and, where appropriate (i.e. focusing on hotspots e.g. traffic junctions, roadworks, etc.), complementary safety-related services based on existing direct short range communication technologies, such as 4G LTE-V2X and ITS-G5, compatible with existing deployment and supporting complementarity between existing and future infrastructure deployments
- The infrastructure under study should **make use of at least one 5G pioneer band (700 MHz, 3.6 GHz, 26 GHz) and if appropriate the 5.9 GHz ITS band and the 900 MHz and 1900 MHz FRMCS bands**¹⁹. If 5G radio-communication technologies are used along the corridor, they should be based on the latest suitable 5G specifications made available by 3GPP, and furthermore be able to integrate upgrades when available. The infrastructure should support advanced service features such as quality of service guarantees enabled by 5G edge computing facilities and facilities allowing for 5G network slicing
- Studies should prove that interference issues with other C-ITS services using the 5.9 GHz ITS band are analysed and adequately addressed in the project. Particular attention should be paid to ensure continuity of legacy services and in particular continued functioning of safety-related services
- The **network quality** of the corridor under study must go beyond existing and/or planned infrastructure along the full corridor and **beyond any legally binding 4G or 5G coverage obligations** attached to spectrum licences that apply to relevant parts of the corridors in question
- The study should plan for the operation of the service beyond the specific section supported by CEF, in view of the long-term development of the more extensive pan-European corridor network
- Studies should plan how the infrastructure is intended to be made available for CAM service providers or other users inside or outside the consortium, e.g. providing access on a non-discriminatory basis to all operators that hold

¹⁹ Commission Implementing Decision (EU) 2021/1730 of 28 September 2021 on the harmonised use of the paired frequency bands 874.4-880.0 MHz and 919.4-925.0 MHz and of the unpaired frequency band 1900-1910 MHz for Railway Mobile Radio. (OJ L 346, 30.9.2021, p.1).

relevant spectrum licenses in the territory concerned, while keeping in mind the respective levels of risk undertaken

- Studies should define **a solid implementation plan**, including access to services and applications with social, economic, and environmental benefits. They should also include a commitment to maintain the infrastructure beyond the lifetime of the project
- The identification of options for specific measures addressing **green policy objectives**, in particular as related to reducing the carbon footprint (such as energy power supply for the 5G radio sites coming from renewable sources) are encouraged
- The infrastructure can be used for services beyond the transport paths under certain conditions, e.g., in areas surrounding the corridor including populated areas or socio-economic drivers where market failure is demonstrated, without causing undue competition distortions or crowding out effects and provided third party open wholesale access under fair, reasonable and non-discriminatory condition is provided.

The **use of sharing models for both passive and active infrastructure to increase the efficient use of funds provided under this programme is also encouraged**. Sharing of passive and/or active equipment by network operators (e.g. through a neutral host model) should aim at substantially reducing network deployment costs and speeding-up the pace of roll-out, while at the same time facilitating the energy efficient use of resources when deploying and operating 5G infrastructure. In addition, wherever possible, existing infrastructure such as ducts, fibre, equipment shelters, power supply and utility poles should be used.

Cross-border sections that are complementary to national 5G corridor sections already planned for deployment by the private sector or identified under RRF or other national programmes in line with state aid rules, are particularly encouraged in this call, in view of their additional potential impact at an early stage.

Proposals must be submitted by consortia composed of at least two different undertakings and/or public bodies which will be taking responsibility as regards ownership, operation and use after the project. The participation of the following actors as part of the consortium is encouraged:

- mobile network operators
- tower companies
- telecom backhaul operators
- road operators
- rail infrastructure managers
- original equipment manufacturers
- mobility service providers (such as innovative solutions providers for traffic management and intelligent transport systems)

Digital security requirements

For all proposals submitted under this topic all participating legal entities must provide security guarantees approved by the Member State²⁰ (or by the respective authorities of the associated country or third country in case of exceptional funding as described in section 6. Eligibility) in which they are established, on the basis of national law.

These guarantees, will certify that the legal entity:


- a) Exercises full control over its corporate structure and decision-making process in a manner that does not restrain or restrict in any way its ability to perform and complete the action and is not subject to foreign jurisdiction obligations that may undermine the security of the Union;
- b) Effectively prevents access by non-eligible third countries or by non-eligible third country entities to classified and non-classified sensitive information relating to the action; and
- c) Ensures that the results of the CEF funded action shall remain within the beneficiary/beneficiaries and shall not be subject to control or restrictions by non-eligible third countries or other non-eligible third country entities during the action and for minimum period of three years after its completion.

Expected impact

Proposals submitted under this topic are expected to prepare for 5G corridor work that will contribute to a wider plan to deploy uninterrupted, end-to-end 5G connectivity throughout the entire CEF corridor covered by the proposal, in synergy, where appropriate, with national actions, such as those identified under RRF.

The inception studies should propose key parameters that will best describe the different features of the proposed 5G corridor, including the aggregate length of the corridors covered by 5G, the spectrum bands to be used along the sections, the inter-radio site distance, the availability of various service features along transport routes, service continuity across the border, as well as the available performance such as data rate and latency for each vehicle as a result of CEF Digital support.

Enabling the use of sharing models for both passive and active infrastructure, which is encouraged in this call, aims to increase the efficient use of funds provided under this programme.

 For more information about the call, see https://hadea.ec.europa.eu/calls-proposals_en

3. Available budget

²⁰ The approval can be provided in the context of Art 11.6, which says: "To be eligible, proposals shall be submitted:(a) by one or more Member States; or (b) with the agreement of the Member States concerned, by international organisations, joint undertakings, or by public or private undertakings or bodies, including regional or local authorities. If the Member State concerned does not agree with a submission under point (b) of the first subparagraph, it shall communicate that information accordingly."

The available call budget for both works and studies is **EUR 100 000 000**. This budget might be increased provided that the total additional budget cumulatively allocated to the topics across all calls of the work programme is lower than 20% of the total budget of the multiannual plan.

Specific budget information per topic can be found in the table below:

Topic	Topic budget
CEF-DIG-2023-5GCORRIDORS-WORKS	95 000 000 EUR
CEF-DIG-2023-5GCORRIDORS-STUDIES	5 000 000 EUR

We reserve the right not to award all available funds or to redistribute them between the call topics, depending on the proposals received and the results of the evaluation.

4. Timetable and deadlines

Timetable and deadlines (indicative)	
Call opening:	17 October 2023
<u>Deadline for submission:</u>	<u>17 January 2024 – 17:00:00 CET</u> <u>(Brussels time)</u>
Evaluation:	February - April 2024
Information on evaluation results:	July 2024
GA signature:	October 2024

5. Admissibility and documents

Proposals must be submitted before the **call deadline** (see timetable section 4).

Proposals must be submitted **electronically** via the Funding & Tenders Portal Electronic Submission System (accessible via the Topic page in the [Search Funding & Tenders](#) section). Paper submissions are NOT possible.

Proposals (including annexes and supporting documents) must be submitted using the forms provided *inside* the Submission System (⚠ NOT the documents available on the Topic page — they are only for information).

Proposals must be **complete** and contain all the requested information and all required annexes and supporting documents:

- Application Form Part A — contains administrative information about the participants (future coordinator, beneficiaries and affiliated entities) and the summarised budget for the project (*to be filled in directly online*)
- Application Form Part B — contains the technical description of the project (*to be downloaded from the Portal Submission System, completed and then assembled and re-uploaded*)

- Part C (*to be filled in directly online, for Works topic only*) containing additional project data
- **mandatory annexes and supporting documents** (*to be uploaded*):
 - detailed budget table per WP (*template available in the Submission System*)
 - activity reports of last year (unless exempted from operational capacity check; *see section 7*)
 - list of previous projects (key projects for the last 4 years) (*template available in Part B*)
 - timetable/Gantt chart (*template available in the Submission System*)
 - letters of support (MS agreement/associated country) (*template available in the Submission System; the list of MS contact points is published in the [HaDEA website](#)*)
 - declaration from the coordinator, on behalf of the consortium, that no 5G infrastructure, present or credibly planned, is capable of providing an uninterrupted mobile coverage suitable for CAM services in the corridor section concerned (*for works proposals, to be uploaded in the Submission System in "Other annexes"*)
 - self-declaration from all Mobile Network Operators involved in the proposal that the public funding of the CEF intervention will not be used by the involved MNOs for the purpose of the fulfilment of any relevant coverage obligation, for instance in the context of spectrum licenses (*for works proposals, to be uploaded in the Submission System in "Other annexes"*)
 - security declarations signed by the participating entities (*for works proposals, template available in the Submission System*)
 - security guarantees approved by the respective Member States (or by the respective authorities of the associated country or third country) (*template available in the Submission System; the list of MS contact points is published in the [HaDEA website](#)*)

Exceptionally, should a Member State require more time to provide its approval, the applicants must submit, by the call deadline, a copy of the security guarantee and the acknowledgment of receipt of the request by the Member States. In this case, the security guarantees approved by the Member States must be sent by the proposal coordinator to HADEA-CEF-DIGITAL-CALLS@ec.europa.eu by 18 March 2024, 17:00:00 CET (Brussels) at the latest, identified with the proposal ID in the email subject.

 - other annexes.

Please note that the amounts entered into the summarised budget table (filled in directly online) must correspond to the amounts calculated in the detailed budget table. In case of discrepancies, the amounts in the online summarised budget table will prevail.

At proposal submission, you will have to confirm that you have the **mandate to act** for all applicants. Moreover, you will have to confirm that the information in the application is correct and complete and that the participants comply with the conditions for receiving EU funding (especially eligibility, financial and operational capacity, exclusion, etc.). Before signing the grant, each beneficiary and affiliated

entity will have to confirm this again by signing a declaration of honour (DoH). Proposals without full support will be rejected.

Your application must be **readable, accessible and printable**.

Proposals are limited to maximum **120 pages** (Part B). Evaluators will not consider any additional pages.

You may be asked at a later stage for further documents (*for legal entity validation, financial capacity check, bank account validation, etc.*).

 For more information about the submission process (including IT aspects), consult the [Online Manual](#).

6. Eligibility

Eligible participants (eligible countries)

In order to be eligible, the applicants (beneficiaries and affiliated entities) must:

- be legal entities (public or private bodies)
- be established in one of the eligible countries, i.e.
 - EU Member States (including overseas countries and territories (OCTs))
 - non-EU countries (except for topics with restrictions; *see below*):
 - countries associated to the CEF Programme or countries which are in ongoing negotiations for an association agreement and where the agreement enters into force before grant signature ([list of participating countries](#))²¹

Beneficiaries and affiliated entities must register in the [Participant Register](#) — before submitting the proposal — and will have to be validated by the Central Validation Service (REA Validation). For the validation, they will be requested to upload documents showing legal status and origin.

Other entities may participate in other consortium roles, such as associated partners, subcontractors, third parties giving in-kind contributions, etc. (*see section 13*).

Please note however that this call is subject to restrictions due to security reasons. This means: only the following countries are eligible: EU Member States.

Moreover:

- participation in any capacity (as beneficiary, affiliated entity, associated partner, subcontractor or recipient of financial support to third parties) is limited to entities from eligible countries
- project activities (included subcontracted work) must take place in eligible countries (*see section geographic location below and section 10*)

²¹ See Art 5.2 of CEF Regulation 2021/1153: the third countries associated to CEF and entities established in those countries, may not receive financial assistance under CEF except where it is indispensable to the achievement of the objectives of a given project of common interest or a project in accordance with Article 7(1) of this Regulation and under the conditions set in the work programme. In addition, the eligibility of associated countries is conditional to the entry into force of the Association Agreement by ratification by the respective national parliaments.

- the Grant Agreement may provide for IPR restrictions (*see section 10*).

Specific cases

Exceptional funding — Entities from other countries (not listed above) are exceptionally eligible for projects of common interest if the granting authority considers their participation essential for the implementation of the action.

Natural persons — Natural persons are NOT eligible (with the exception of self-employed persons, i.e., sole traders, where the company does not have legal personality separate from that of the natural person).

International organisations — International organisations²² are eligible. The rules on eligible countries do not apply to them.

Entities without legal personality — Entities which do not have legal personality under their national law may exceptionally participate, provided that their representatives have the capacity to undertake legal obligations on their behalf, and offer guarantees for the protection of the EU financial interests equivalent to that offered by legal persons²³.

EU bodies — EU bodies (with the exception of the European Commission Joint Research Centre) can NOT be part of the consortium.

Countries currently negotiating association agreements — Beneficiaries from countries with ongoing negotiations (*see above*) may participate in the call and can sign grants if the negotiations are concluded before grant signature (with retroactive effect, if provided in the agreement).

EU restrictive measures — Special rules apply for certain entities (*e.g. entities subject to [EU restrictive measures](#) under Article 29 of the Treaty on the European Union (TEU) and Article 215 of the Treaty on the Functioning of the EU (TFEU)*²⁴ and entities covered by Commission Guidelines No [2013/C 205/05](#)²⁵). Such entities are not eligible to participate in any capacity, including as beneficiaries, affiliated entities, associated partners, subcontractors or recipients of financial support to third parties (if any).

 For more information, see [Rules for Legal Entity Validation, LEAR Appointment and Financial Capacity Assessment](#).

Consortium composition

Proposals must be submitted by:

for topic CEF-DIG-2023-5GCORRIDORS-WORKS:

- minimum 2 applicants (beneficiaries; not affiliated entities) from at least two Member States, or a Member State and associated or third country
- exceptionally, when there is no terrestrial border with a Member State, 5G corridor deployment projects crossing the border of a third country or terminating at a

²² An 'international organisation' means an intergovernmental organisation (other than the EU) with legal personality under international public law (including specialised agencies — with or without legal personality — set up by international organisations and referred to in Article 156(1) EU Financial Regulation [2018/1046](#).

²³ See Article 197(2)(c) EU Financial Regulation [2018/1046](#).

²⁴ Please note that the EU Official Journal contains the official list and, in case of conflict, its content prevails over that of the [EU Sanctions Map](#).

²⁵ Commission guidelines No [2013/C 205/05](#) on the eligibility of Israeli entities and their activities in the territories occupied by Israel since June 1967 for grants, prizes and financial instruments funded by the EU from 2014 onwards (OJEU C 205 of 19.07.2013, pp. 9-11).

port with maritime connections to other EU Member States, minimum 2 applicants (beneficiaries; not affiliated entities) from at least one Member State.

for topic CEF-DIG-2023-5GCORRIDORS-STUDIES:

- minimum 2 applicants (beneficiaries; not affiliated entities) from at least two Member States, or a Member State and associated or third country
- exceptionally, when there is no terrestrial border with a Member State, 5G corridor deployment projects crossing the border of a third country or terminating at a port with maritime connections to other EU Member States, minimum 2 applicants (beneficiaries; not affiliated entities) from at least one Member State.

Eligible activities

Eligible activities are the ones set out in section 2 above.

Projects should take into account the results of projects supported by other EU funding programmes. The complementarities must be described in the project proposals (Part B of the Application Form).

Projects must comply with EU policy interests and priorities (*such as environment, social, security, industrial and trade policy, etc.*).

Financial support to third parties is not allowed.

Geographic location (target countries)

Proposals must relate to activities taking place in the eligible countries (*see above*).

Duration

Works actions: project duration should normally be up to 36 months (extensions are possible, if duly justified and through an amendment).

Studies actions: project duration should normally be up to 6 months (extensions are possible, if duly justified and through an amendment).

Project budget

Works: project budgets (maximum grant amount) are expected to be between EUR 10 000 000 and 25 000 000 per project.

Studies: project budgets (maximum grant amount) are expected to be between EUR 300 000 and 1 000 000 per project.

However, lower or higher project budgets are possible for both Works and Studies, if duly justified.

The grant awarded may be lower than the amount requested.

7. Financial and operational capacity and exclusion

Financial capacity

Applicants must have **stable and sufficient resources** to successfully implement the projects and contribute their share. Organisations participating in several projects must have sufficient capacity to implement all these projects.

The financial capacity check will be carried out on the basis of the documents you will be requested to upload in the [Participant Register](#) during grant preparation (*e.g. profit and loss account and balance sheet, business plan, audit report produced by an approved external auditor, certifying the accounts for the last closed financial year, etc*). The analysis will be based on neutral financial indicators, but will also take into account other aspects, such as dependency on EU funding and deficit and revenue in previous years.

The check will normally be done for all beneficiaries, except:

- public bodies (entities established as public body under national law, including local, regional or national authorities) or international organisations
- if the individual requested grant amount is not more than EUR 60 000.

If needed, it may also be done for affiliated entities.

If we consider that your financial capacity is not satisfactory, we may require:

- further information
 - an enhanced financial responsibility regime, i.e. joint and several responsibility for all beneficiaries or joint and several liability of affiliated entities (*see below, section 10*)
 - prefinancing paid in instalments
 - (one or more) prefinancing guarantees (*see below, section 10*)
- or
- propose no prefinancing
 - request that you are replaced or, if needed, reject the entire proposal.

 For more information, see [Rules for Legal Entity Validation, LEAR Appointment and Financial Capacity Assessment](#).

Operational capacity

Applicants must have the **know-how, qualifications** and **resources** to successfully implement the projects and contribute their share (including sufficient experience in projects of comparable size and nature).

This capacity will be assessed together with the 'Quality' award criterion, on the basis of the competence and experience of the applicants and their project teams, including operational resources (human, technical and other) or, exceptionally, the measures proposed to obtain it by the time the task implementation starts.

If the evaluation of the award criterion is positive, the applicants are considered to have sufficient operational capacity.

Applicants will have to show their capacity via the following information:

- description of the consortium participants
- applicants' activity reports of last year
- list of previous projects (key projects for the last 4 years).

Additional supporting documents may be requested, if needed to confirm the operational capacity of any applicant.

Public bodies, Member State organisations and international organisations are exempted from the operational capacity check.

Exclusion

Applicants which are subject to an **EU exclusion decision** or in one of the following **exclusion situations** that bar them from receiving EU funding can NOT participate²⁶:

- bankruptcy, winding up, affairs administered by the courts, arrangement with creditors, suspended business activities or other similar procedures (including procedures for persons with unlimited liability for the applicant's debts)
- in breach of social security or tax obligations (including if done by persons with unlimited liability for the applicant's debts)
- guilty of grave professional misconduct²⁷ (including if done by persons having powers of representation, decision-making or control, beneficial owners or persons who are essential for the award/implementation of the grant)
- committed fraud, corruption, links to a criminal organisation, money laundering, terrorism-related crimes (including terrorism financing), child labour or human trafficking (including if done by persons having powers of representation, decision-making or control, beneficial owners or persons who are essential for the award/implementation of the grant)
- shown significant deficiencies in complying with main obligations under an EU procurement contract, grant agreement, prize, expert contract, or similar (including if done by persons having powers of representation, decisionmaking- or control, beneficial owners or persons who are essential for the award/implementation of the grant)
- guilty of irregularities within the meaning of Article 1(2) of Regulation No [2988/95](#) (including if done by persons having powers of representation, decisionmaking- or control, beneficial owners or persons who are essential for the award/implementation of the grant)
- created under a different jurisdiction with the intent to circumvent fiscal, social or other legal obligations in the country of origin or created another entity with this purpose (including if done by persons having powers of representation, decisionmaking- or control, beneficial owners or persons who are essential for the award/implementation of the grant).

Applicants will also be refused if it turns out that²⁸:

- during the award procedure they misrepresented information required as a condition for participating or failed to supply that information
- they were previously involved in the preparation of the call and this entails a distortion of competition that cannot be remedied otherwise (conflict of interest).

²⁶ See Articles 136 and 141 of EU Financial Regulation [2018/1046](#).

²⁷ Professional misconduct includes: violation of ethical standards of the profession, wrongful conduct with impact on professional credibility, false declarations/misrepresentation of information, participation in a cartel or other agreement distorting competition, violation of IPR, attempting to influence decision-making processes or obtain confidential information from public authorities to gain advantage.

²⁸ See Article 141 EU Financial Regulation [2018/1046](#).

8. Evaluation and award procedure


The proposals will have to follow the **standard submission and evaluation procedure** (one-stage submission + one-step evaluation).

An **evaluation committee** (assisted by independent outside experts) will assess all applications. Proposals will first be checked for formal requirements (admissibility, and eligibility, *see sections 5 and 6*). Proposals found admissible and eligible will be evaluated (for each topic) against the operational capacity and award criteria (3 phases: individual evaluation, consensus phase and panel review) and then ranked according to their scores (*see sections 7 and 9*).

For proposals with the same score (within a topic or budget envelope) a **priority order** will be determined according to the following approach:

- 1) Score obtained under the 'Priority and urgency' criterion
- 2) Score obtained under the 'Relevance and maturity' criterion
- 3) Score obtained under the 'Catalytic effect' criterion
- 4) Score obtained under the 'Impact' criterion
- 5) Score obtained under the 'Quality' criterion.

All proposals will be informed about the evaluation result (**evaluation result letter**). Successful proposals will be invited for grant preparation; the other ones will be put on the reserve list or rejected. Proposals that are below the budget threshold (i.e. passed, but not ranked high enough to receive funding) will be awarded a Seal of Excellence.

 No commitment for funding – Invitation to grant preparation does NOT constitute a formal commitment for funding. We will still need to make various legal checks before grant award: *legal entity validation, financial capacity, exclusion check, etc.*

Grant preparation will involve a dialogue in order to fine-tune technical or financial aspects of the project and may require extra information from your side. It may also include adjustments to the proposal to address recommendations of the evaluation committee or other concerns. Compliance will be a pre-condition for signing the grant.

If you believe that the evaluation procedure was flawed, you can submit a **complaint** (following the deadlines and procedures set out in the evaluation result letter). Please note that notifications which have not been opened within 10 days after sending are considered to have been accessed and that deadlines will be counted from opening/access (*see also [Funding & Tenders Portal Terms and Conditions](#)*). Please also be aware that for complaints submitted electronically, there may be character limitations.

9. Award criteria

The **award criteria** for this call are as follows:

- **Priority and urgency:** evaluating correspondence of the proposal with the sectoral policy objectives and priorities, measuring its EU added-value and, where applicable, assessing the possible synergies with other sectors or CEF Digital topics and, where applicable, ensuring a geographical balance of the CEF digital support in the respective area. (5 points)

- **Maturity:** assessing the maturity of the action in the project development. The criterion will measure, among others, i) the readiness and ability of the project to start by the proposed start date and to complete by the proposed end date, ii) the status and planning of the contracting procedures and the necessary permits, and iii) information on the availability of the financial resources needed to complement the CEF investment. (5 points)
- **Quality:** evaluating the soundness of the implementation plan proposed, both from the technical and financial point of view, the architecture and design approach, the organisational structures put in place (or foreseen) for the implementation, the risk analysis, the control procedures and quality management and the communication strategy of the applicant. Moreover, when applicable, it will also assess the information related to the operations/maintenance strategy proposed for the completed project. (5 points)
- **Impact:** assessing, when applicable, the economic, social, competition and environmental impact, including the climate impact, and other relevant externalities. This criterion may be substantiated by a Cost Benefit Analysis (CBA), in which case the evaluation will look at the soundness, comprehensiveness, and transparency of the analysis as well as proposed means to monitor its impact. The criterion will also assess, where applicable, the safety, security, cybersecurity of electronic communication networks, interoperability and accessibility aspects of the proposal, innovation and digitalisation, its cross-border dimension, and contribution to network integration and territorial accessibility, including particular for Outermost Regions and islands. Moreover, the criterion will assess, where applicable, potential complementarities with other public funding programmes. (5 points)
- **Catalytic effect:** evaluating the effect of the EU financial assistance on the realisation of the project, for instance by overcoming a financial gap generated by insufficient commercial viability, high upfront costs or the lack of market finance, increasing the capacity to mobilise differentiated investments sources, improving the quality of the project or accelerating the overall investment plan. (5 points).

– Award criteria	Minimum pass score	Maximum score
Priority and urgency	3	5
Maturity	3	5
Quality	3	5
Impact	3	5
Catalytic effect	3	5
Overall (pass) scores	15	25

Maximum points: 25 points.

Individual thresholds per criterion: 3/5, 3/5, 3/5, 3/5 and 3/5 points.

Overall threshold: 15 points.

10. Legal and financial set-up of the Grant Agreements

If you pass evaluation, your project will be invited for grant preparation, where you will be asked to prepare the Grant Agreement together with the EU Project Officer.

This Grant Agreement will set the framework for your grant and its terms and conditions, in particular concerning deliverables, reporting and payments.

The Model Grant Agreement that will be used (and all other relevant templates and guidance documents) can be found on [Portal Reference Documents](#).

Starting date and project duration

The project starting date and duration will be fixed in the Grant Agreement (*Data Sheet, point 1*). Normally the starting date will be after grant signature. Retroactive application can be granted exceptionally for duly justified reasons — but never earlier than the proposal submission date.

For project duration: *please see section 6 above*.

Milestones and deliverables

The milestones and deliverables for each project will be managed through the Portal Grant Management System and will be reflected in Annex 1 of the Grant Agreement.

Beneficiaries will also be invited to check and update information regarding indicators (if applicable).

Form of grant, funding rate and maximum grant amount

The grant parameters (*maximum grant amount, funding rate, total eligible costs, etc.*) will be fixed in the Grant Agreement (*Data Sheet, point 3 and art 5*).

Project budget (maximum grant amount): see section 6 above.

The grant will be a budget-based mixed actual cost grant (actual costs, with unit cost and flat-rate elements). This means that it will reimburse ONLY certain types of costs (eligible costs) and costs that were *actually* incurred for your project (NOT the *budgeted* costs). For unit costs and flat-rates, you can charge the amounts calculated as explained in the Grant Agreement (*see art 6 and Annex 2 and 2a*).

The costs will be reimbursed at the funding rates fixed in the Grant Agreement (maximum **50%** for the costs of studies, maximum **70%** for the costs of works in outermost regions, and maximum **30%** for all other costs categories ('project funding rate')).

You can apply for a higher project funding rate if your project concerns:

- strong cross-border dimension: maximum **50%**

Grants may NOT produce a profit (i.e. surplus of revenues + EU grant over costs). For-profit organisations must declare their revenues and, if there is a profit, we will deduct it from the final grant amount (*see art 22.3*).

Moreover, please be aware that the final grant amount may be reduced in case of non-compliance with the Grant Agreement (*e.g. improper implementation, breach of obligations, etc.*).

Budget categories and cost eligibility rules

The budget categories and cost eligibility rules are fixed in the Grant Agreement (*Data Sheet, point 3, art 6 and Annex 2*).

Budget categories for this call:

- A. Personnel costs
 - A.1 Employees, A.2 Natural persons under direct contract, A.3 Seconded persons
 - A.4 SME owners and natural person beneficiaries
- B. Subcontracting costs
- C. Purchase costs
 - C.1 Travel and subsistence
 - C.2 Equipment
 - C.3 Other goods, works and services
- D. Other cost categories
 - D.1 Financial support to third parties
 - D.2 Studies
 - D.3 Synergetic elements
 - D.4 Works in outermost regions
- E. Indirect costs


Specific cost eligibility conditions for this call:


- personnel costs:
 - average personnel costs (unit cost according to usual cost accounting practices): Yes
 - SME owner/natural person unit cost²⁹: Yes
- subcontracting costs:
 - country restrictions for subcontracting costs: Yes, subcontracted work must be performed in the eligible countries or target countries
- travel and subsistence unit cost³⁰: No (only actual costs)
- equipment costs: full cost
- other cost categories:
 - costs for financial support to third parties: not allowed
 - studies: Yes
 - synergetic elements: Yes (only for 'Works' Actions, not for 'Studies')
 - works in outermost regions: Yes
 - land purchases: No

²⁹ Commission [Decision](#) of 20 October 2020 authorising the use of unit costs for the personnel costs of the owners of small and medium-sized enterprises and beneficiaries that are natural persons not receiving a salary for the work carried out by themselves under an action or work programme (C(2020)7715).

³⁰ Commission [Decision](#) of 12 January 2021 authorising the use of unit costs for travel, accommodation and subsistence costs under an action or work programme under the 2021-2027 multi-annual financial framework (C(2021)35).

- indirect cost flat-rate: 0% of the eligible direct costs (categories A-D, except volunteers costs, if any)
- VAT: VAT is NOT eligible
- other:
 - in-kind contributions for free are allowed, but cost-neutral, i.e. they cannot be declared as cost
 - project websites: communication costs for presenting the project on the participants' websites or social media accounts are eligible; costs for *separate* project websites are not eligible
 - eligible cost country restrictions: Yes, only costs for activities carried out in eligible countries or target countries are eligible
 - other ineligible costs: Yes, costs related to purchase of land

 Please be aware that in case of significant changes to the circumstances that have an impact on the project budget, you may be asked to request an amendment to reduce the maximum grant amount. If you do not comply with this request, we may have to terminate the grant and reduce it from our side (*see art 32*).

 Similarly, you may be asked to request an amendment to reduce the maximum grant amount, if your project encounters major delays during the project implementation. If you do not comply with this request, we may have to terminate the grant (*see art 32*).

Reporting and payment arrangements

The reporting and payment arrangements are fixed in the Grant Agreement (*Data Sheet, point 4 and art 21 and 22*).


After grant signature, you will normally receive a **prefinancing** to start working on the project. The amount will be established based on the grant type or estimated project duration at the time of grant signature and will be up to 30% of the maximum grant amount. The prefinancing will be paid 30 days from entry into force/financial guarantee (if required — whichever is the latest).

There will be **no interim payments for Studies topic** (CEF-DIG-2023-5GCORRIDORS-STUDIES). There will be **one or more interim payments** (with detailed cost reporting) **for Works topic** (CEF-DIG-2023-5GCORRIDORS-WORKS).

In addition, for Works topic you will be expected to submit one or more progress reports not linked to payments.

Payment of the balance: At the end of the project, we will calculate your final grant amount. If the total of earlier payments is higher than the final grant amount, we will ask you (your coordinator) to pay back the difference (recovery).

All payments will be made to the coordinator.

 Please be aware that payments will be automatically lowered if one of your consortium members has outstanding debts towards the EU (granting authority or other EU bodies). Such debts will be offset by us — in line with the conditions set out in the Grant Agreement (*see art 22*).

Please note that you are responsible for keeping records on all the work done [and the costs declared.

Prefinancing guarantees

If a prefinancing guarantee is required, it will be fixed in the Grant Agreement (*Data Sheet, point 4*). The amount will be set during grant preparation and it will normally be equal or lower than the prefinancing for your grant.

The guarantee should be in euro and issued by an approved bank/financial institution established in an EU Member State. If you are established in a non-EU country and would like to provide a guarantee from a bank/financial institution in your country, please contact us (this may be exceptionally accepted, if it offers equivalent security).

Amounts blocked in bank accounts will NOT be accepted as financial guarantees.

Prefinancing guarantees are formally NOT linked to individual consortium members, which means that you are free to organise how to provide the guarantee amount (*by one or several beneficiaries, for the overall amount or several guarantees for partial amounts, by the beneficiary concerned or by another beneficiary, etc*). It is however important that the requested amount is covered and that the guarantee(s) are sent to us in time to make the prefinancing (scanned copy via Portal AND original by post).

If agreed with us, the bank guarantee may be replaced by a guarantee from a third party.

The guarantee will be released at the end of the grant, in accordance with the conditions laid down in the Grant Agreement.

Certificates

Depending on the type of action, size of grant amount and type of beneficiaries, you may be requested to submit different certificates. The types, schedules and thresholds for each certificate are fixed in the grant agreement (*Data Sheet, point 4 and art 24*).

Liability regime for recoveries

The liability regime for recoveries will be fixed in the Grant Agreement (*Data Sheet point 4.4 and art 22*).

For beneficiaries, it is one of the following:

- limited joint and several liability with individual ceilings — *each beneficiary up to their maximum grant amount*
- unconditional joint and several liability — *each beneficiary up to the maximum grant amount for the action*

or

- individual financial responsibility — *each beneficiary only for their own debts*.

In addition, the granting authority may require joint and several liability of affiliated entities (with their beneficiary).

Provisions concerning the project implementation

Security rules: *see Model Grant Agreement (Annex 5)*

IPR rules: *see Model Grant Agreement (art 16 and Annex 5):*

- rights of use on results: Yes

Communication, dissemination and visibility of funding: *see Model Grant Agreement (art 17 and Annex 5):*

- communication and dissemination plan: No
- additional communication and dissemination activities: Yes
- special logos: No

Specific rules for carrying out the action: *see Model Grant Agreement (art 18 and Annex 5):*

- Member State information: Yes
- specific rules for digital infrastructure projects: Yes
- durability: Yes
- specific rules for blending operations: No

Other specificities

n/a

Non-compliance and breach of contract

The Grant Agreement (chapter 5) provides for the measures we may take in case of breach of contract (and other non-compliance issues).



For more information, see [AGA — Annotated Grant Agreement](#).

11. How to submit an application

All proposals must be submitted directly online via the Funding & Tenders Portal Electronic Submission System. Paper applications are NOT accepted.

Submission is a 2-step process:

a) create a user account and register your organisation

To use the Submission System (the only way to apply), all participants need to [create an EULogin user account](#).

Once you have an EULogin account, you can [register your organisation](#) in the Participant Register. When your registration is finalised, you will receive a 9-digit participant identification code (PIC).

b) submit the proposal

Access the Electronic Submission System via the Topic page in the [Search Funding & Tenders](#) section (or, for calls sent by invitation to submit a proposal, through the link provided in the invitation letter).

Submit your proposal in 4 parts, as follows:

- Part A includes administrative information about the applicant organisations (future coordinator, beneficiaries, affiliated entities and associated partners) and the summarised budget for the proposal. Fill it in directly online

- Part B (description of the action) covers the technical content of the proposal. Download the mandatory word template from the Submission System, fill it in and upload it as a PDF file
- Part C containing additional project data (for Works topic only). To be filled in directly online.
- Annexes (*see section 5*). Upload them as PDF file (single or multiple depending on the slots; the budget table can be uploaded as Excel file).

The proposal must keep to the **page limits** (*see section 5*); excess pages will be disregarded.

Documents must be uploaded to the **right category** in the Submission System otherwise the proposal might be considered incomplete and thus inadmissible.

The proposal must be submitted **before the call deadline** (*see section 4*). After this deadline, the system is closed and proposals can no longer be submitted.

Once the proposal is submitted, you will receive a **confirmation e-mail** (with date and time of your application). If you do not receive this confirmation e-mail, it means your proposal has NOT been submitted. If you believe this is due to a fault in the Submission System, you should immediately file a complaint via the [IT Helpdesk webform](#), explaining the circumstances and attaching a copy of the proposal (and, if possible, screenshots to show what happened).

Details on processes and procedures are described in the [Online Manual](#). The Online Manual also contains the links to FAQs and detailed instructions regarding the Portal Electronic Exchange System.

12. Help

As far as possible, ***please try to find the answers you need yourself***, in this and the other documentation (we have limited resources for handling direct enquiries):

- [Online Manual](#)
- FAQs on the Topic page (for call-specific questions in open calls; not applicable for actions by invitation)
- [Portal FAQ](#) (for general questions)
- call information on the [HaDEA website](#)

Please also consult the Topic page regularly, since we will use it to publish call updates.

Contact

For individual questions on the Portal Submission System, please contact the [IT Helpdesk](#).

Non-IT related questions should be sent to the following email address: HADEA-CEF-DIGITAL-CALLS@ec.europa.eu. Please submit your questions³¹ no later than 10 days

³¹ Interested applicants are invited to see first if a question is already answered from the existing FAQs published on the Funding & Tenders Portal.

before the submission deadline. Questions received after 10 January 2024 may not be answered.

Please indicate clearly the reference of the call and topic to which your question relates (*see cover page*).

13. Important



IMPORTANT

- **Don't wait until the end** — Complete your application sufficiently in advance of the deadline to avoid any last minute **technical problems**. Problems due to last minute submissions (*e.g. congestion, etc.*) will be entirely at your risk. Call deadlines can NOT be extended.
- **Consult** the Portal Topic page regularly. We will use it to publish updates and additional information on the call (call and topic updates).
- **Funding & Tenders Portal Electronic Exchange System** — By submitting the application, all participants **accept** to use the electronic exchange system in accordance with the [Portal Terms & Conditions](#).
- **Registration** — Before submitting the application, all beneficiaries, affiliated entities and associated partners must be registered in the [Participant Register](#). The participant identification code (PIC) (one per participant) is mandatory for the Application Form.
- **Consortium roles** — When setting up your consortium, you should think of organisations that help you reach objectives and solve problems.

The roles should be attributed according to the level of participation in the project. Main participants should participate as **beneficiaries** or **affiliated entities**; other entities can participate as associated partners, subcontractors, third parties giving in-kind contributions. **Associated partners** and third parties giving in-kind contributions should bear their own costs (they will not become formal recipients of EU funding).
- **Coordinator** — In multi-beneficiary grants, the beneficiaries participate as consortium (group of beneficiaries). They will have to choose a coordinator, who will take care of the project management and coordination and will represent the consortium towards the granting authority. In mono-beneficiary grants, the single beneficiary will automatically be coordinator.
- **Affiliated entities** — Applicants may participate with affiliated entities (i.e. entities with a legal or capital link to a beneficiary which participate in the action with similar rights and obligations as the beneficiaries, but do not sign the grant and therefore do not become beneficiaries themselves). They will get a part of the grant money and must therefore comply with all the call conditions and be validated (just like beneficiaries); but they do not count towards the minimum eligibility criteria for consortium composition (if any).
- **Associated partners** — Applicants may participate with associated partners (i.e. partner organisations which participate in the action but without the right to get grant money). They participate without funding and therefore do not need to be validated.
- **Consortium agreement** — For practical and legal reasons it is recommended to set up internal arrangements that allow you to deal with exceptional or unforeseen circumstances (in all cases, even if not mandatory under the Grant Agreement). The consortium agreement also gives you the possibility to redistribute the grant money according to your own consortium-internal principles and parameters (for instance, one beneficiary can reattribute its grant money to another beneficiary). The consortium agreement thus allows you to customise the EU grant to the needs inside your consortium and can also help to protect you in case of disputes.

- **Balanced project budget** — Grant applications must ensure a balanced project budget and sufficient other resources to implement the project successfully (*e.g. own contributions, income generated by the action, financial contributions from third parties, etc*). You may be requested to lower your estimated costs, if they are ineligible (including excessive).
- **No-profit rule** — Grants may NOT give a profit (i.e. surplus of revenues + EU grant over costs). This will be checked by us at the end of the project.
- **No double funding** — There is a strict prohibition of double funding from the EU budget (except under EU Synergies actions). Outside such Synergies actions, any given action may receive only ONE grant from the EU budget and cost items may under NO circumstances declared to two different EU actions.
- **Completed/ongoing projects** — Proposals for projects that have already been completed will be rejected; proposals for projects that have already started will be assessed on a case-by-case basis (in this case, no costs can be reimbursed for activities that took place before the project starting date/proposal submission).
- **Combination with EU operating grants** — Combination with EU operating grants is possible, if the project remains outside the operating grant work programme and you make sure that cost items are clearly separated in your accounting and NOT declared twice (see [AGA — Annotated Model Grant Agreement, art 6.2.E](#)).
- **Multiple proposals** — Applicants may submit more than one proposal for *different* projects under the same call (and be awarded a funding for them).

Organisations may participate in several proposals.

BUT: if there are several proposals for *very similar* projects, only one application will be accepted and evaluated; the applicants will be asked to withdraw one of them (or it will be rejected).

- **Resubmission** — Proposals may be changed and re-submitted until the deadline for submission.
- **Rejection** — By submitting the application, all applicants accept the call conditions set out in this this Call Document (and the documents it refers to). Proposals that do not comply with all the call conditions will be **rejected**. This applies also to applicants: All applicants need to fulfil the criteria; if any one of them doesn't, they must be replaced or the entire proposal will be rejected.
- **Cancellation** — There may be circumstances which may require the cancellation of the call. In this case, you will be informed via a call or topic update. Please note that cancellations are without entitlement to compensation.
- **Language** — You can submit your proposal in any official EU language (project abstract/summary should however always be in English). For reasons of efficiency, we strongly advise you to use English for the entire application. If you need the call documentation in another official EU language, please submit a request within 10 days after call publication (for the contact information, see *section 12*).

