

EVALUATION AND FITNESS CHECK (FC) ROADMAP			
TITLE OF THE EVALUATION/FC	Mid-term evaluation of the Connecting Europe Facility (CEF)		
LEAD DG RESPONSIBLE UNIT	DG MOVE.B.4 (in coordination with DG ENER.B.1 and DG CNECT.F.3)	DATE OF THIS ROADMAP	26 May 2016
TYPE OF EVALUATION	Mid-term Evaluation Mixed The evaluation will be supported with a study to be carried out by an external contactor	PLANNED START DATE	2 nd quarter 2016
		PLANNED COMPLETION DATE	4 th quarter 2017
		PLANNING CALENDAR	http://ec.europa.eu/smart-regulation/evaluation/index_en.htm
This indicative roadmap is provided for information purposes only and is subject to change.			

A. Purpose
(A.1) Purpose
<p>The overall purpose of the mid-term evaluation of the Connecting Europe Facility (CEF) is to report on the progress in achieving the programmes objectives, the efficient use of resources, and its European added value (Article 27 of the CEF Regulation¹).</p> <p>The CEF mid-term evaluation will be carried out with a view to deciding on the renewal, suspension or modification of the measures (Article 5.3 of the CEF Regulation). It might nurture the discussions on the mid-term review of the Multiannual Financial Framework (MFF) 2014-2020 and may contribute to the preparation of the next MFF in early 2018.</p>
(A.2) Justification
<p>Article 27 of the CEF Regulation provides that the Commission, in cooperation with the Member States and beneficiaries concerned, shall prepare an evaluation report to be presented by the Commission to the European Parliament and the Council no later than 31 December 2017.</p>

B. Content and subject of the evaluation
(B.1) Subject area
<p><u>Horizontal</u></p> <p>The CEF was set up in the context of the Europe 2020 Strategy² which is about achieving smart, sustainable and inclusive growth and stimulating job creation. For this it is necessary to have up-to-date, high-performance infrastructure to help connect and integrate the Union and all its regions, in the transport, telecommunications and energy sectors. The trans-European networks should facilitate cross-border connections, foster greater economic,</p>

¹ Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, OJ L 348, 20.12.2013, p. 129

² Adopted by the Commission on 3 March 2010, and endorsed by the European Council on 17 June 2010

social and territorial cohesion, and contribute to a more competitive social market economy and to combating climate change.

The CEF was proposed as a common financing programme for the completion of trans-European infrastructure networks as set out in Guidelines in the fields of transport³, energy⁴ and telecommunications⁵. The rationale for a common funding instrument was to enable synergies between the three sectors to be harnessed to the full, thus enhancing the effectiveness of EU action and enabling implementing costs to be optimised.

The overall aim of the CEF is to enable projects of common interest in these three sectors. These projects should aim at the development and construction of new infrastructures and services, or at the upgrading of existing ones. Accordingly, the CEF should accelerate investment and leverage funding from public and private sectors.

The CEF's original budget of EUR 33.2 billion was reduced by 8% with the establishment of the European Fund for Strategic Investments (EFSI) under President Juncker's Investment Plan for Europe in June 2015⁶. The EFSI provides for loans and guarantees, managed by the European Investment Bank, notably for investment in infrastructure projects in the 3 CEF sectors. It is complementary to the CEF (in particular the CEF's financial instruments) and other EU financing programmes. Thus the CEF budget for 2014-2020 is now EUR 30.4 billion, of which approximately EUR 24.1 billion for transport, EUR 5.35 billion for energy and EUR 1 billion for telecommunications.

The CEF primarily provides for financial assistance essentially in two forms:

- Grants (app. 90% of the budget) provided through calls for proposals managed for the majority by the European Commission with the assistance of its Innovation and Networks Executive Agency (INEA);
- Financial instruments (app. 9%): developed together with entrusted financial institutions such as the European Investment Bank (EIB)⁷. These financial instruments build on the experience with previous such instruments, notably the Marguerite Fund, the Loan Guarantee for TEN Transport (LGTT) and the Project Bond Initiative.

In addition the CEF can fund Programme support actions (app. 1%) which are technical assistance actions aimed at helping the Commission, Member States or stakeholders in the implementation of the programme.

The CEF funding is based on Commission Implementing Decisions establishing Multi-Annual and Annual Work Programmes which set out inter alia the budget, the objectives and funding priorities, the funding instrument etc.

The CEF represents only a small percentage of the investment sum needed to meet the objectives of the TEN Guidelines for transport^{8,9}, energy^{10,11} and telecommunications^{12,13}. The two other main EU sources for the financing of infrastructure at European level are – first and foremost – the European Structural and Investment Funds (ESIF)¹⁴, accounting for EUR 454 billion, and the European Fund for Strategic Investments (EFSI)

³ Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network

⁴ Regulation (EU) 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009

⁵ Regulation (EU) No 283/2014 of the European Parliament and of the Council of 11 March 2014 on guidelines for trans-European networks in the area of telecommunications infrastructure and repealing Decision No 1336/97/EC

⁶ Regulation (EU) 2015/1017 of the European Parliament and of the Council of 25 June 2015 on the European Fund for Strategic Investments, the European Investment Advisory Hub and the European Investment Project Portal and amending Regulations (EU) No 1291/2013 and (EU) No 1316/2013 — the European Fund for Strategic Investments. The original CEF budget was EUR 33.2 billion, of which EUR 26.2 billion for transport, EUR 5.5 billion for energy and EUR 1.1 for telecoms.

⁷ Commission Decision C(2015) 5172 final of 22 July 2015 on the conclusion of the Delegation Agreement between the European Union and the European Investment Bank in respect of the Debt Instrument under the Connecting Europe Facility.

⁸ COM(2011)0650 final/3

⁹ COM(2011)0665 final/2

¹⁰ Energy infrastructure priorities for 2020 and beyond – A Blueprint for an integrated European energy network [COM(2010) 677 final] of 17 November 2010); Energy 2020: A strategy for competitive, secure, and sustainable energy [COM(2010)639]

¹¹ The International Energy Agency (IEA) has recently assessed that the cumulative investment in EU electricity and gas transmission infrastructure for 2014-2035 will be in the order of: EUR 217-276 billion for gas (annual average: EUR 12.5 billion); EUR 139-153 billion for electricity (annual average: EUR 6.5 billion). Source: International Energy Agency, World Investment Outlook 2014. Paris: OECD/IEA, p. 167.

¹² European Parliament: Broadband infrastructure, Supporting the digital economy in the European Union, In-depth Analysis, September 2015 — PE 565.891

¹³ A Digital Single Market Strategy for Europe - Analysis and Evidence, SWD(2015) 100 final {COM(2015) 192 final}

¹⁴ The ESIF is made up of five coordinated funds: European Regional Development Fund (ERDF) European Social Fund (ESF) Cohesion Fund (CF) European Agricultural Fund for Rural Development (EAFRD) European Maritime & Fisheries Fund (EMFF)

accounting for EUR 21 billion which seeks to leverage EUR 315 billion of total investment. While the bulk of the investment needed in these infrastructure sectors should be delivered by the market, EU financing may be needed for specific projects with wider regional and European benefits which are unable to attract market-based financing. The CEF can therefore play an important role to bridge the funding gap in regions and sub-sectors where there is most need for European intervention.

Transport

Background

CEF Transport is the successor of the Trans-European transport network (TEN-T) programme¹⁵, which provided funding for the development of the TEN-T in addition to other EU financing instruments such as the Cohesion Fund and the European Regional and Development Fund (ERDF).

Market Analysis

The Commission estimated in 2011 that the completion of the TEN-T network would require a total investment of about EUR 500 billion by 2020, of which EUR 250 billion to complete missing links and remove bottlenecks in the core network. While the market and national budgets were expected to play a major role in delivering the infrastructures required to complete the TEN-T through appropriate investment and pricing mechanisms, a number of investments in infrastructure would not take place or would be delayed beyond 2020 if the EU did not take action.

Transport Guidelines and CEF funding

In December 2013 the Union established a new framework for the development of EU transport infrastructure (the TEN-T Guidelines) and the means to support it financially via the CEF.

The Guidelines define the TEN-T network as well as specific infrastructure requirements for each transport mode and deadlines for Member States and relevant stakeholders such as infrastructure managers, regions and others as well as the EU. They provide for the development of a strategic core network by 2030 which links major nodes (urban nodes, ports, airports and other transport terminals) through key rail, road, inland waterway, maritime and air transport connections. In addition, a comprehensive network ensuring accessibility to all regions is to be developed by 2050.

The Guidelines and the CEF establish nine priority Core Network Corridors (CNC) to facilitate the coordinated implementation of the core network¹⁶ and a list of projects pre-identified in those corridors for priority EU funding during the period 2014 – 2020, based on their added value for TEN-T development and their maturity status.

The implementation of CEF Transport funding is based on the experience of the 2007-2013 TEN-T programme¹⁷. The budget of EUR 24.1 billion for the transport sector includes EUR 11.3 billion exclusively for support to projects of common interest in Member States eligible for the Cohesion Fund. The aim is to overcome the obstacles that traditionally some of the Cohesion Member States face to deliver on time complex cross-border transport

¹⁵ The TEN-T policy exists since the mid-1990s. The first "Community Guidelines" for the development of a trans-European network in the transport sector, adopted in 1996, established a "master plan" connecting national networks of all transport modes. These Guidelines - modified in 1999 - determined projects' eligibility for EC/EU funding. Regulations governing EC/EU funding from the TEN-T budget were adopted for the periods 1995–1999, 2000–2006 and 2007–2013. Other EU funds – notably the Cohesion Fund and the ERDF – also contributed significantly to developing the TEN-T. The Guidelines also constituted a reference framework for Member States' infrastructure policy. For the period 2007-2013, the TEN-T programme supported projects of common interest in the TEN-T with a budget of about EUR 8.1 billion.

¹⁶ To make sure that the corridors are developed effectively and efficiently, each is led by a European Coordinator, supported by a consultative forum (the "Corridor Forum"), on the basis of a comprehensive work plan. There are in total 11 coordinators, for the nine CNCs plus ERTMS and Motorways of the Seas.

¹⁷ With the CEF, the EU funding moved from the TEN-T 2007-2013 approach of concentration on 30 Priority Projects to a focus on core network corridors as established in the TEN-T guidelines. CEF contributes to supporting projects with a European added value and with significant societal benefits which do not receive adequate financing from the market. It gives priority to cross-border, bottleneck and missing link projects.

infrastructure projects which contribute to completing the TEN-T network.

The CEF Regulation outlines a list of pre-identified projects on the TEN-T core network, to which the majority (80 to 85%) of CEF funding will be allocated:

- horizontal priorities, such as SESAR, telematics applications (ITS, ERTMS, RIS and VTIMS), Motorways of the Sea and innovation and new technologies,
- pre-identified projects in the core network corridors, and
- pre-identified projects in the other sections of the core network.

As regards the use of CEF financial instruments, the CEF Debt Instrument (operational since July 2015) serves to increase the level of investment in transport infrastructures in the EU in the period 2014-2020.

In addition, the Commission put in place a number of instruments (Communication¹⁸, delegated act¹⁹, work plans of the European Coordinators for the Core Network Corridors, financing decisions in the form of work programmes²⁰, and related calls for proposals²¹) since the adoption of the TEN-T and CEF Regulations in order to reach the ambitious goals therein.

Energy

Background

Previously to the implementation of CEF-Energy programme, the two main programmes aimed to support the energy infrastructure development were the "Trans-European Energy Networks" (TEN-E) and the European Energy Programme for Recovery (EEPR)²². The TEN-E financial assistance programme ran from 2007 to 2013. An overall of 127 actions were financed through this programme, with a total EU funding of 143 MEUR. The main reported obstacles to the implementation of the projects covered a range of issues, with the main common obstacles reported are related to: legal and regulatory framework; financial and technical constraints, lengthy permitting.

The lessons learned under the TEN-E programme were taken into consideration in the provisions of the Guidelines on Trans-European Network for Energy Guidelines, in force since April 2013.

Market analysis

In the context of the Energy Infrastructure Package²³, the Commission estimated that the investment to modernise and expand Europe's energy infrastructure is in the order of EUR 200 billion until 2020 in electricity and gas transmission and storage infrastructure, of which around two-thirds for electricity and smart grids infrastructure.

Recent studies performed by the International Energy Agency (IAE)²⁴ confirm the need for further investment increase in energy infrastructures in the run-up to 2030 and beyond.

While the bulk of the investment needed in energy should be delivered by the market and its costs recovered through tariffs, it is however recognised that Union financing may be needed for specific projects with wider regional and European benefits which are unable to attract market-based financing. As explained below, CEF can therefore play an important role to bridge the funding gap in regions where there is most need for European

¹⁸ Communication on 'Building the transport core network: core network corridors and Connecting Europe Facility' COM(2013) 940 final of 7 January 2014.

¹⁹ Commission Delegated Regulation (EU) No 275/2014 of 7 January 2014 amending Annex I to Regulation (EU) No 1316/2013 of the European Parliament and of the Council establishing the Connecting Europe Facility

²⁰ The Commission decisions on CEF transport work programmes and projects selected for funding may be found in: http://ec.europa.eu/transport/themes/infrastructure/reference-documents/index_en.htm

²¹ The CEF Transport calls for proposals can be found at:

²² The European Energy Programme for Recovery (EEPR) was established as a one-off in 2009 to address both Europe's economic crisis and European energy policy objectives. 3.98 BEUR billion were assigned to co-finance EU energy projects that would boost the economic recovery, increase the security of energy supply and contribute to the reduction of greenhouse gas emissions, of those 44 were gas and electricity infrastructure projects.

²³ Energy infrastructure priorities for 2020 and beyond – A Blueprint for an integrated European energy network [COM(2010) 677 final] of 17 November 2010; Energy 2020: A strategy for competitive, secure, and sustainable energy [COM(2010)639]

²⁴ See footnote No. 13.

intervention.

TEN-E Guidelines and CEF funding

The Trans European Network for Energy (TEN-E) Guidelines²⁵ identify twelve priority corridors and thematic areas in the field of cross border energy infrastructure that must be implemented in the coming decade to help the EU meet its short and longer term energy and climate objectives. The TEN-E guidelines provide the policy framework to facilitate the implementation of the projects of common interest (PCIs).

To help create an integrated EU energy market, the Commission has drawn up a list of 195 key energy infrastructure projects known as projects of common interest (PCIs). These are essential for completing the European internal energy market and for reaching the EU's energy policy objectives of affordable, secure and sustainable energy.

Starting from priority corridors, a new, dynamic process to identify PCIs – based on strict criteria measured by cost-benefit-analysis²⁶.

Once identified, these projects will benefit from the following measures:

- Measures to accelerate permit granting (3.5 years' time limit, one-stop shop and transparency)
- Improved regulatory treatment for cross-border projects (risk-related incentives, cost allocation in function of net benefits)

Eligibility to receive CEF financial assistance The budget for CEF Energy accounts for EUR 5.35 billion in the period 2014-2020.

The CEF can provide financial support to those projects in terms of grants and financial instruments²⁷. As regards the use of CEF financial instruments in the sector, the CEF Debt Instrument aims to support the Projects of Common Interest where the instrument can facilitate access to debt capital from commercial lending institutions, institutional investors or senior lending from the European Investment Bank.

Telecommunications

Background

The Digital Single Market²⁸ strategy defines broadband networks and digital services as the driver of European economic growth. ICT networks provide the backbone for digital products and services which have the potential to support all aspects of our lives, and drive Europe's economic recovery²⁹. To achieve those objectives, CEF Telecom supports the deployment and interoperability of projects of common interest focusing on trans-European networks, in the form of digital service infrastructures (for about EUR 870 million) and broadband networks (for near EUR 156 million).

Digital Service Infrastructures (DSI)

CEF Telecom supports DSI based on mature technical and organisational solutions to allow exchanges and collaboration between citizens, businesses and public authorities within and across European borders. Due to non-territoriality of DSI, and often their inherently cross-border character a pan-European coordinated infrastructural

<https://ec.europa.eu/inea/en/connecting-europe-facility/cef-transport/apply-funding>

²⁶To be selected as a PCI, a project must have a significant impact on the energy markets and market integration of at least two EU countries, boost competition on energy markets and boost the EU's energy security by diversifying sources, and contribute to the EU's climate and energy goals by integrating renewables. The PCIs are selected according to the following process: in short, first, project promoters propose their projects for selection. Then so-called Regional Groups including representatives from Member States, the Commission, transmission system operators and their European networks, project promoters, regulatory authorities as well as the Agency for the Cooperation of Energy Regulators (ACER) assess the projects' compliance with the criteria and their European added value. Based on this assessment the Commission adopts the list of projects of common interest.

²⁷ With the exception of PCIs in the oil sector

²⁸ A Digital Single Market Strategy for Europe [COM(2015) 192 final]

²⁹ The Commissioner Oettinger at his keynote speech has pointed out the need of Gigabit broadband networks to drive the growth of European industry: "We need a Gigabit infrastructure for a Gigabit economy", CeBIT Global Conferences/EU Conference - 14 March 2016: Keynote "On the way to the Digital Union".

approach is needed to ensure interoperability and EU-wide usability..

Specifically, the CEF Telecom identifies as projects of common interest basic and re-usable digital services, known as building blocks, as well as more complex digital services. The building blocks³⁰ can be combined with each other and integrated with the more complex services.

Broadband:

To ensure best value for money and given the limited resources, the CEF funding targets projects which rely on the technology best suited for the specific project, can help spur innovative business models and show a high potential for replication. In the field of broadband, the actions funded consist in one or more of the following components:

- (a) the deployment of physical infrastructure and ancillary infrastructure elements, and the services necessary to operate such infrastructure;
- (b) associated facilities and services (e.g. building wiring, antennae, towers and other supporting constructions);
- (c) where possible, synergies between the roll-out of broadband networks and other utilities networks (energy, transport, water, sewerage, etc.)

Market analysis

Digital Service Infrastructures

The policy challenge on the European level is mainly to ensure the interoperability and cross-border availability of online service infrastructures. Without them, the Digital Single Market, which could contribute €415 billion to the European economy, will remain incomplete.

As an example of the DSIs' contribution, it has been estimated that the overall economic gains from further opening up Public Sector Information, as supported by the Public Open Data DSI, are around EUR 40 billion for the EU³¹. Efficiency gains are also expected to occur, as exemplified by eProcurement. In particular, public procurement represents approximately 19% of EU GDP and EU wide e-procurement is expected to save EUR 50 billion annually³².

Broadband

The European Commission has estimated³³ to meet the EU broadband targets by 2020, in the most optimistic scenario, for the coverage target (30 Mbps for all) will be reached if EUR 34 billion is invested, of which EUR 21 billion should come from public source. The estimate to reach the take-up target (half of the European households with 100 Mbps subscription) is EUR 92.4 billion.

CEF funding

DSI: The CEF offers funding opportunities either via calls for tenders to procure services for the core components provided by the European Commission, or calls for proposals (grants) to help linking the national infrastructure in the Member States to the core components.

Broadband: The CEF enables using financial instruments to reach the objectives and operational priorities identified for the deployment of broadband networks. Given limited budget available, the use of new business models of broadband roll-out will be encouraged by the use of debt and equity financing, including the use of project bonds, in line with the Digital Agenda for Europe and the Digital Single Market.,

(B.2) Original objectives of the intervention

³⁰ Building blocks supported so far include: eIdentification; eSignature; eInvoicing; eDelivery; and Automated Translation. More complex digital services supported so far cover, among others, the areas of safer internet, access to reusable public sector information, cyber security, eHealth, and online dispute resolution. The projects of common interest in the field of digital service infrastructures are available in the Annex of the Telecommunications Guidelines.

³¹ http://www.europarl.europa.eu/meetdocs/2009_2014/documents/sec/com_sec%282011%291229_/com_sec%282011%291229_en.pdf

³² A Digital Single Market Strategy for Europe – Analysis and Evidence, SWD(2015) 100 final, COM(2015) 192 final.

³³ Ibidem.

Horizontal

The CEF has been designed as a common financing programme for trans-European infrastructure networks of transport, energy and telecommunications. It should realise synergies for infrastructure investments in the three sectors. For transport and energy, the programme was also intended to build synergies with Horizon 2020 and complement research through support for roll-out / pilot projects in innovation and new technologies in these areas.

The original objectives of the establishment of the CEF, in line with the Treaty objectives³⁴, are to contribute better and more efficiently to the development of trans-European networks of infrastructure, by developing a coherent funding framework at EU level, allowing resources at both EU and national level to be focussed on common priorities defined at EU level, ensuring high efficiency and leverage of the EU budget contribution³⁵.

As set out in Recital 2 of the Regulation, the aim of the creation of CEF was to:

- Accelerate investment in the field of trans-European networks
- leverage funding from both the public and the private sectors
- enable synergies between transport, energy, ICT to be harnessed to the full
- increase legal certainty and respect the principle of technological neutrality
- enable implementation costs to be optimised

The general objectives of CEF are:

(a) contributing to smart, sustainable and inclusive growth, in line with the Europe 2020 Strategy,

(b) enabling the Union to achieve its sustainable development targets (a minimum 20 % reduction of greenhouse gas emissions compared to 1990 levels, a 20 % increase in energy efficiency, and raising the share of renewable energy to 20 % by 2020),

Specific horizontal objectives cover:

- developing modern and high-performing trans-European networks which take into account expected future traffic flows
- social and territorial cohesion in the internal market
- creating an environment more conducive to private, public or public- private investment

This should result in the following impacts:

- improving competitiveness on the global market and economic growth
- contributing to the Union's mid-term and long-term objectives in terms of decarbonisation
- ensuring greater solidarity among Member States.

Transport

In the transport sector, the CEF shall support projects of common interest that pursue one or more of the following objectives (Art. 4.2 of the CEF Regulation):

(a) Removing bottlenecks, enhancing rail interoperability, bridging missing links and, in particular improving cross-border sections;

(b) Ensuring sustainable and efficient transport systems in the long run, with a view to preparing for expected future transport flows, as well as enabling all modes of transport to be decarbonised

(c) Optimising the integration and interconnection of transport modes and enhancing the interoperability of transport services, while ensuring the accessibility of transport infrastructures.

Energy

In the energy sector, the CEF shall support projects of common interest that pursue one or more of the following specific objectives (Art. 4 of the CEF Regulation):

³⁴ Articles 170 and 171 of the Treaty on the European Union

³⁵ Impact assessment accompanying the draft Regulation establishing the Connecting Europe Facility (COM(2011)0665 final/2)

- (a) increasing competitiveness by promoting the further integration of the internal energy market and the interoperability of electricity and gas networks across borders;
- (b) enhancing Union security of energy supply;
- (c) contributing to sustainable development and protection of the environment, inter alia by the integrating energy from renewable sources into the transmission network; and by
- (d) developing smart energy networks and carbon dioxide networks.

Telecommunications

In the Telecommunications sector, the CEF shall support projects of common interest that pursue one or more of the following specific objectives:

- (a) economic growth and support to the completion and functioning of the internal market in support of the competitiveness of the European economy, including small and medium-sized enterprises (SMEs);
- (b) improvements in daily life for citizens, businesses and public authorities at every level through the promotion of broadband networks, interconnection and interoperability of national, regional and local broadband networks, as well as non-discriminatory access to such networks and digital inclusion.

These objectives translate in the following operational priorities:

- (a) interoperability, connectivity, sustainable deployment, operation and upgrading of trans-European digital service infrastructures, as well as coordination at European level;
- (b) efficient flow of private and public investments to stimulate the deployment and modernisation of broadband networks with a view to contributing to achieving the broadband targets of the Digital Agenda for Europe.

The indicators to measure the achievement of the specific objectives of Telecommunications sector are set out in Article 3 of Telecom Regulation 283/2014.

(B.3) How the objectives were to be achieved

The objectives were to be achieved by the establishment of a dedicated "Connecting Europe facility" covering energy, transport and telecommunications investments.

The common infrastructure facility was planned to finance infrastructure projects with high EU added value, not only 'hard' infrastructure, but also 'soft and smart' infrastructure and governance structures to realise the transport "Core Network", the energy "priority corridors" as well as digital infrastructures.

The objectives are to be achieved through Union financial assistance in the form of grants, financial instruments, or through a combination of financial instruments and Union direct support where projects could benefit from such a combination of instruments.

The Work Programmes should be coordinated in such a way as to exploit the synergies between transport, energy and telecommunications in particular in such areas as smart energy grids, electric mobility, intelligent and sustainable transport systems, joint rights of way or infrastructure coupling. This should be achieved through at least one multi-sectorial call for proposals for actions with synergies between sectors³⁶.

In the transport sector, the programme objectives should be met by supporting projects, through grants or by means of loans and guarantees under the CEF Debt Instrument, which contribute to the completion of the TEN-T network. In this respect, priority is given to projects of high EU added value, i.e. in particular projects building or upgrading cross-border sections, removing bottlenecks on the main European traffic routes, and prioritising the realisation of links currently missing in the network. Priority is also given to horizontal priorities such as intelligent transport systems in all modes of transport as well as to innovation and new technologies, i.e. the transition to innovative low-carbon and energy-efficient transport technologies, while optimising safety.

In the energy sector, the programme aims to target projects with high European value added, such as cross-border

³⁶ See Commission Implementing Decision C(2016) 1778 final of 31 March 2016: http://ec.europa.eu/transport/themes/infrastructure/reference-documents/index_en.htm

interconnections or the deployment of EU-wide systems, which must be implemented by 2020.

In the telecoms sector, the programme objectives should be met by:

- (a) Creating and/or enhancing interoperable and, whenever possible, internationally compatible core service platforms, accompanied by generic services for digital service infrastructures;
- (b) providing efficient investment vehicles for broadband networks, attract new categories of investors and project promoters, and encourage replicability of innovative projects and business models.

In the area of digital service infrastructures, core service platforms shall be implemented primarily by the Union while generic services shall be implemented by the parties connecting to the relevant core service platform. Investments in broadband networks shall be undertaken predominantly by the private sector, supported by a competitive and investment-friendly regulatory framework. Public support in the form of financial instruments for broadband networks shall be provided only where there is market failure or a sub-optimal investment situation.

C. Scope of the evaluation/FC

(C.1) Topics covered

The evaluation is composed by an overarching part addressing the progress towards the overall objectives of the CEF Programme ("horizontal part"), and three sectorial parts addressing the progress towards the objectives specific to the sectors of transport, energy, and telecommunications.

During the time of the evaluation it is expected that few CEF-supported projects in the three CEF sectors will have been completed or have produced significant results. The evaluation should therefore take account of, instead of being based on, the project results. However, it may address the outcome of a sample of completed projects in the three sectors as appropriate.

The evaluation will take stock of the progress of the implementation of the CEF (in terms of budgetary years 2014, 2015, as well as a part of 2016 and 2017 if possible). The evaluation will address the three forms of financial assistance under the CEF: grants, financial instruments and programme support actions.

The evaluation will also take into account the independent full scale evaluation of the Europe 2020 Project Bonds Initiative, which was completed in April 2016.

(C.2) Issues to be examined

The evaluation will look at the internal and external coherence of the measures, the continued relevance of all objectives and their contribution to the current Commission priorities as well as the Union priorities of smart, sustainable and inclusive growth, including their impact on economic, social and territorial cohesion. The evaluation will include an assessment of the economies of scale made by the Commission at a financial, technical and human level when managing the CEF and, where applicable, of the total number of projects harnessing the synergies between the sectors. The evaluation will also assess how to make financial instruments more effective. Where applicable, the evaluation report will take into account the results of the previous evaluations concerning the long-term impact of the measures under the predecessor programmes of the CEF, and which are of relevance for the implementation of the CEF. These results may serve as a basis for the Commission proposal to adopt delegated acts in accordance with Article 26 of the CEF Regulation, if deemed necessary.

The evaluation of the horizontal objectives common to the transport, energy and telecommunications sectors is carried out in respect of the general objectives outlined in Article 3 of the CEF Regulation.

The evaluation of the specific objectives for each of the three CEF sectors will be carried out in respect of the specific objectives in Article 4 of the CEF Regulation. In the case of telecommunications, reference is made to the objectives outlined in the Regulation on guidelines for trans-European networks in the area of telecommunications infrastructure³⁷ ('Telecommunications guidelines')

The evaluation of the CEF programme will be conducted against the following criteria: relevance, effectiveness,

³⁷ Regulation (EU) No 283/2014 of the European Parliament and of the Council of 11 March 2014 on guidelines for trans-European networks in the area of telecommunications infrastructure

efficiency, coherence and EU added-value. The evaluation questions will be refined in the course of the evaluation process.

1) Relevance: To what extent have the objectives and activities of the CEF Programme proved consistent with the needs of the EU market to date, as set out in the Europe 2020 strategy and relevant EU policy documents and market analysis in the 3 sectors, as well as with the beneficiaries' needs? How can such consistency be improved?

The evaluation shall assess the continued relevance of the CEF general objectives and their contribution to the Europe 2020 strategy, as well as to the EU and the Juncker Commission objectives notably those related to the priorities 'Internal market', 'Jobs, growth and investment', 'Energy Union and climate' and 'Digital single market'. With regard to the CEF financial instruments, the evaluation shall assess whether the design of the instruments was conducive to reaching the objectives of the CEF Programme.

2) Effectiveness: What is the main outcome of the CEF so far? To what extent do the outputs and results of the CEF correspond to the objectives? How effective has the use of financial instruments been so far, and how could the use of CEF financial instruments be made more effective? To what extent has it been possible to leverage funding from the national public and private sectors?

The evaluation should assess the extent to which the CEF contributed to progress towards the general objectives in terms of smart, sustainable and inclusive growth as well as towards the specific objectives in the three sectors. The evaluation will also address the contribution of the CEF to the above EU and Commission objectives. It will also assess the extent to which the CEF contributed to an acceleration of investments in the area of Trans-European networks.

3) Efficiency: Are the costs resulting from the implementation of the CEF proportional to the results to be achieved? How could the administration and management of the programme be improved to enhance its efficiency? To what extent are the available budget, instruments and governance model contributing to the achievement of the objectives?

One key aspect that will be assessed concerns the exploitation of the synergies between the transport, energy and telecommunications, notably in terms of optimisation of implementation costs. In particular, the evaluation of efficiency will include also an assessment of the potential for regulatory simplification and burden reduction, particularly for project promoters. An assessment of the centralised management of the CEF programme by the Commission services in cooperation with INEA, to which the programme management (grants part) was delegated, will be conducted.

4) Coherence: How well does the CEF fit with other EU policy objectives/other EU policy interventions?

The evaluation will address the coherence of the CEF with other EU policies that contribute to the CEF objectives and to the above EU and Commission objectives. The coherence of the CEF with other sector specific policies and activities will be assessed. In addition, the complementarity of the CEF with respect to other tools of public intervention at EU level, particularly with ESIF and EFSI, and Horizon 2020, will be evaluated where appropriate. Bearing in mind the objective to devote at least 20% of the EU funding to climate action objectives (ref. Recital 8 of the CEF Regulation) the evaluation will assess the extent to which commitments / contributions so far under the CEF programme comply with this policy objective.

5) EU-added value: What is the EU added-value of the CEF compared to what was or could be achieved by the private sector or by Member States at national and/or regional levels, and how could it be maximised? Is there still a need to continue CEF funding at EU level? If so, why?

The evaluation will assess the EU added-value of the CEF programme, for example the extent to which CEF support has promoted transnational cooperation and generated economies of scale; the extent to which it has fostered the development of cross-border, bottlenecks and missing links projects, and whether such projects might otherwise not have been completed. It will also address the extent to which CEF was used efficiently and with added-value after the budget transfer to EFSI in 2015, as well as the outcome so far of blending of CEF grants and EFSI loans and guarantees.

(C.3) Other tasks

The evaluation will cover finished and ongoing grants/procurement actions, all projects supported by the CEF Financial Instruments to date, and will take into account interviews with relevant stakeholders, expert groups, the Commission and Member States. Relevant existing reports and studies will also be taken into account.

Independent, external consultants will be engaged to process the relevant economic, financial, technical information necessary to carry out the evaluation of the horizontal and sectorial parts of the CEF through desk research, in-person interviews, surveys, etc.

D. Evidence base

(D.1) Evidence from monitoring

The evaluation will build primarily on information related to grants for actions, financial instruments and Programme Support Actions supported under the CEF. Information from financing of infrastructure projects from other EU sources, private and national sources will also be analysed where appropriate.

Evidence will be collected from relevant sectorial studies and implementation reports carried out in the transport, energy and telecommunications sectors.

In the transport sector, evidence will be collected from Activity Status Reports of projects of common interest and other monitoring tools notably in the context of the TEN-T Corridor fora.

In the energy sector, evidence will be collected also by means of PCI implementation Plans³⁸ and other monitoring tools used by the Commission in the context of the Regional Groups.

In the telecoms sector, there is evidence on actions implemented stemming from monitoring activities carried out by or in conjunction with other institutional stakeholders and agencies, for example DIGIT and INEA, as well as from the Digital Agenda Scoreboard.

(D.2) Previous evaluations and other reports

For all the CEF sectors:

- Commission Staff Working Document (SWD(2016) 58 final and SWD(2016) 60 final) on the Ad-hoc Audit of the pilot phase of Europe 2020 Project Bond Initiative:
http://ec.europa.eu/economy_finance/financial_operations/investment/europe_2020/index_en.htm
- the final external evaluation of the pilot phase of Europe 2020 Project Bond Initiative (2015 ECFIN 008/L, report available in April 2016) see
http://ec.europa.eu/economy_finance/financial_operations/investment/europe_2020/index_en.htm

For CEF Transport a preliminary non-exhaustive list is the following:

- CEF Transport Work Programmes and project selection decisions:
http://ec.europa.eu/transport/themes/infrastructure/news/2015-06-29-cef_en.htm
- Nine core network corridor studies, including lists of projects and TENtec compliance maps, see:
http://ec.europa.eu/transport/themes/infrastructure/ten-t-guidelines/corridors/corridor-studies_en.htm
- TEN-T Corridor work plans and Coordinators progress reports
http://ec.europa.eu/transport/themes/infrastructure/ten-t-guidelines/index_en.htm

³⁸ Article 5.1 of the TEN- E Regulation 347/2013 requires project promoters to draw up an implementation plan, including a timetable regarding feasibility and design studies, approvals by the National Regulatory Authorities and others, permitting, construction and commissioning. These implementation plans are publicly available on the PCI Transparency Platform.

- Fraunhofer Study on the Cost of non-completion of the TEN-T, see: <http://ec.europa.eu/transport/themes/infrastructure/studies/doc/2015-06-fraunhofer-cost-of-non-completion-of-the-ten-t.pdf>
- Biennial report on the implementation of the TEN-T Guidelines – article 49 of the TEN-T (when available)
- Ex-post evaluation of the TEN-T 2007 – 2013 programme (when available)
- Reports on the implementation of the EU structural funds
- European Court of Auditor performance audit reports in the field of transport
- ESIF evaluation reports from the 2017-13 period
- Factsheets of the Art 16 report: The Digital Single Market, The Energy Union and Climate-change policies, The Internal Market
- Other political communication / Council conclusions related to the past and present ESIF investments in the 3 fields of CEF

For CEF Energy a preliminary non-exhaustive list is the following:

- TEN-E framework reports
<http://ec.europa.eu/transparency/regdoc/rep/1/2010/EN/1-2010-203-EN-F1-1.Pdf>
<https://ec.europa.eu/energy/sites/ener/files/documents/TEN-E%20financed%20projects%201995-2013%20for%20Europa.pdf>
- The structuring and financing of energy infrastructure projects, financing gaps and recommendations regarding the new TEN-E financial instrument
https://ec.europa.eu/energy/sites/ener/files/documents/2011_ten_e_financing_report.pdf
- Reports from the Commission to the European Parliament and the Council on the implementation of the European Energy Programme for Recovery
https://ec.europa.eu/energy/sites/ener/files/documents/2014_iem_communication_annex5.pdf
- ACER Consolidated report on PCI monitoring³⁹ :
http://www.acer.europa.eu/Official_documents/Publications/Pages/Publication.aspx

Other relevant studies in the area of energy infrastructures which can be found under https://ec.europa.eu/energy/en/studies?field_associated_topic_tid=48, including, among others:

- Study on regulatory incentives for investments in electricity and gas infrastructure projects, 2013
- Grid infrastructure development: European Strategy for raising public acceptance, 2014
https://ec.europa.eu/energy/sites/ener/files/documents/20140618_grid_toolkit_report.pdf
- Follow-up study on regional Baltic LNG terminal, 2014
- Study on comparative review of investment conditions for electricity and gas Transmission System Operators (TSOs) in the European Union, 2014
- Study on regulatory matters concerning the development of the North and Irish Sea offshore energy potential - First results regulatory analysis, 2014
- Study on assessment frameworks of the socio-economic impacts of the Projects of Common Interest in the context of the TEN-E Regulation (347/2013), 2014

The evaluation will also draw from previous and ongoing studies done by the Commission and research centres in the area of intervention of public financing and energy infrastructure implementation. The reports on the implementation of the Trans European Energy Networks 2007-2013 (TEN-E) and of the European Energy programme for Recovery (EEPR) will be covered.

For CEF Telecom a preliminary non-exhaustive list is the following:

- Study on "The feasibility and scenarios for the long-term sustainability of the Large Scale Pilots, including 'ex-ante' evaluation". See <https://ec.europa.eu/digital-agenda/en/news/final-report-study-feasibility-and-scenarios-long-term-sustainability-large-scale-pilots>
- Study on the long term sustainability of Digital Service Infrastructures (expected in the course of 2016)
- Study on the maturity of the Digital Service Infrastructures supported by the Connecting Europe Facility. See <http://ec.europa.eu/digital-agenda/en/news/study-maturity-digital-service-infrastructures-supported->

³⁹ Reference: 2015, to be updated once 2016 report will be available.

[connecting-europe-facility](#)

- Studies on eGovernment, for example eGovernment benchmark report. See <https://ec.europa.eu/digital-agenda/en/news/eu-egovernment-report-2014-shows-usability-online-public-services-improving-not-fast>
- Statistical information on the implementation of the activities i.e. Digital Agenda Scoreboard DESI index. See: <https://ec.europa.eu/digital-agenda/en/desi>
- Relevant policy documents reviews, such as documents produced in the context of the eSENS project, the EU Directive on cost reduction (2014/61/EU).
- Broadband Investment guide, see:
- http://ec.europa.eu/newsroom/dae/document.cfm?action=display&doc_id=6908
- State-Aid guidelines, see: <http://www.digitalplan.gov.gr/resource-api/dipla/contentObject/The-Broadband-State-Aid-rules-explained/content>
- Studies and recent publications in the field of broadband, such as most effective financial instruments for the CEF broadband activity i.e. "Ventura" study (SMART 2014/00680). See <http://ec.europa.eu/digital-agenda/en/news/assessment-alternatives-market-sentiment-towards-and-recommendation-most-effective-financial>
- Study on National Broadband plans in the EU (expected to be launched soon, EU SMART 2014/0077).
- Market study for broadband infrastructure fund by the EIB (on-going)
- Connected Communities workshop see: <http://ec.europa.eu/digital-agenda/events/cf/connected-communities-experience-sharing/item-display.cfm?id=15644> and seminar, see: <https://ec.europa.eu/digital-agenda/events/cf/connected-communities-mutual-learning/item-display.cfm?id=15657>

(D.3) Evidence from assessing the implementation and application of legislation (complaints, infringement procedures)

NA

(D.4) Consultation

For the mid-term evaluation, it is foreseen to involve in the evaluation process the Member States, project promoters, the EIB regarding the financial instruments, a representative sample of project beneficiaries, and possibly regional and local procuring authorities and infrastructure managers/core investors in the projects closed with support from CEF Financial Instruments as appropriate.

For CEF Transport, the European Coordinators for the 9 Core Network Corridors and the 2 horizontal priorities (ERTMS and MoS) will also be consulted, as will be service providers (operator undertakings) and infrastructure managers of all modes.

For CEF Energy, ACER, the ENTSOs, and the Regional Groups established under the TEN-E Regulation will also be involved.

For CEF Telecom, within the limits of confidentiality provisions, relevant group of experts (CEF Telecom Expert Group/CEF Coordination Committee in the Telecom configuration) will be interviewed. Other stakeholders to be consulted might include end users, as well as experts and broadband infrastructures stakeholders.

The list of stakeholders consulted and the exact way that this consultation will be conducted (survey, interview, other methods) will have to be taken into account by the interested consultants in their tender offer.

This roadmap will be open for feedback during a four-week period, envisaged in April / May 2016. The feedback will be used to amend the roadmap, where necessary.

Further, in the context of this mid-term evaluation, an internet-based 12-week open public consultation will be launched by the Commission at the latest in July 2016. It will seek views of the concerned stakeholders and wider public with regard to the relevance, effectiveness, efficiency, coherence and EU added value of the CEF. The public consultation will be available in English; answers may be provided in any of the official EU languages.

The consultation will be published on http://ec.europa.eu/transport/index_en.htm as well as on Your Voice in Europe (http://ec.europa.eu/yourvoice/consultations/index_en.htm). The synopsis report summarising the results of all consultation activities linked to this initiative will be published on the consultation web page.

All citizens and organisations can contribute to the consultation. Contributions are particularly sought from following categories of stakeholders: project promoters, Member States representatives, regional and local authorities, infrastructure managers.

(D.5) Further evidence to be gathered

NA

E. Other relevant information/ remarks

NA