

Connecting Europe Facility

Investing in Europe's growth





۲

۲



INVESTING IN EUROPE'S GROWTH

۲

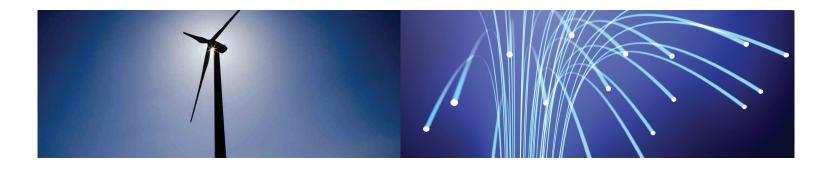
FOREWORD:



"The Connecting Europe Facility and the Project Bond Initiative are a perfect demonstration of the value added that Europe can provide. These proposals will help to build the roads, railways, energy grids and pipelines, and broadband networks that are so important to our citizens and businesses.

We are closing the missing links in Europe's infrastructure networks that otherwise would not be built. This investment will generate growth and jobs and at the same time make work and travel easier for millions of European citizens and businesses."

> **José Manuel Barroso,** President of the European Commission



CONNECTING EUROPE FACILITY

CONTENTS

FOREWORD

Table of contents

Section 1. The Connecting Europe Facility in context

CEF in the EU Multiannual Financial Framework (MFF) 2014-2020 CEF and the European Single Market CEF and the EU 2020 Strategy for Growth and Jobs Synergies and simplification CEF and innovative financial instruments Coordination with other Sources of EU Financial Support

Section 2. How will the Connecting Europe Facility work?

The management of EU funds under the CEF

Management of grants Support via innovative financial instruments

Section 3. Connecting Europe Facility – one instrument, three sectors

CEF Energy

۲

A new policy framework Financing needs and priorities

CEF Digital

The new Telecommunications Guidelines Needs and objectives Broadband Internet Access Role of Financial Instruments Digital Service Infrastructures

CEF Transport

A new policy framework Financing needs and priorities Targeted investments in strategic EU added-value infrastructure Grants – direct EU support Innovative financial instruments – leveraging EU investments A special mechanism for projects in Member States eligible to Cohesion Fund support

3

THE CONNECTING EUROPE FACILITY IN CONTEXT

CEF in the EU Multiannual Financial Framework (MFF) 2014-2020

With a proposed budget of €50 billion between 2014 and 2020, the Connecting Europe Facility¹¹ will be a key instrument to promote growth, jobs and competitiveness through targeted infrastructure investment at European level. It will support the development of high-performing, sustainable and efficiently interconnected trans-European networks in the fields of transport, energy and digital services.

CEF investments will plug the gaps that would not be filled if the market, or existing publicsector instruments were the only options. It would thus tap into an important potential source of economic growth.

The Connecting Europe Facility will benefit people across all Member States, as it will make travel easier and more sustainable, it will enhance Europe's energy security while enabling wider use of renewables, and CEF will help modernise public administration in Europe by bringing more public services on line, a source of immense savings for hard-pressed public budgets.

CEF in figures (according to the European Commission MFF proposal of 29 June 2011)

	€50 billion (total)				
	€9.1 billion (energy	€9.2 billion	€31.7 billion (transport infrastructure)		
CEF 2014-2020	infrastructure)	(broadband infrastructure)	€21.7 billion	€10 billion (earmarked from the Cohesion Fund) *	

*For investments exclusively in the Member States eligible to Cohesion Fund support (see section CEF Transport)

The €50 billion will create significant leverage and attract additional public and private funding through the use of innovative financial instruments, notably EU project bonds. In the energy sector, the €9.2 billion available, together with the regulatory and permitting solutions proposed in parallel, should allow the timely delivery of more than €200 billion worth of important projects. Likewise, an improved regulatory environment, combined with new financial instruments should leverage at least €50 billion for investment into high-speed broadband, the backbone of the digital single market. The €31.8 billion proposed EU co-funding for transport projects is expected to generate about €140-150 billion of investments.

The European Commission first proposed the establishment of the Connecting Europe Facility in June 2011, as part of its EU budget proposal for the next multi-annual financial framework (MFF) 2014-2020. The proposal was submitted to the European Parliament and the Council, and it is expected to be adopted by the two co-legislators before the end of 2013.

For more information on the European Commission proposal for the EU budget in the Multiannual Financial Framework 2014-2020: http://ec.europa.eu/budget/reform/

Proposal for a Regulation establishing the Connecting Europe Facility of 19 October 2011. COM (2011) 665 final[®]

۲

 (\mathbf{r})

THE CONNECTING EUROPE FACILITY IN CONTEXT

CEF and the European Single Market

As a recent report by former European Commissioner Mario Monti concludes, a truly integrated Single Market would not be possible without a seamless connection among all its component parts.² Indeed, roads and other transport connections, electricity and gas transmission grids, as well as digital networks are vital for a functioning, integrated economic area and for its social and territorial cohesion. By focusing on smart, sustainable and fully interconnected energy and transport networks, the CEF will help to complete the European single market. CEF support to broadband networks and cross-border public services online will allow millions of citizens and business to connect to the Digital Single Market, whether at home or while traveling within Europe.

Currently, significant missing links exist, notably in the Member States which joined the Union more recently, creating dividing lines between the centre and peripheries of the European Union and limiting access to each other's markets. They also hamper the further development of intracommunity exchanges or the growth of new economic sectors, such as e-commerce. Missing cross-border physical interconnections also hamper the potential benefits derived from more integrated markets, as regulatory integration within the EU advances (seen most recently in the energy sector with the adoption and entry into force of the third liberalisation package). Energy security remains far from being achieved without appropriate infrastructure connections and possibilities to reverse gas flows.

EU level intervention, through grants and financial instruments, will focus on initiatives that eliminate or reduce market fragmentation. It will also focus on initiatives that increase European security and have considerable growth enhancement potential and/or socio-economic benefits.

For more information on the EU Single Market: http://ec.europa.eu/internal_market/index_ en.htm

CEF and the EU 2020 Strategy for growth and jobs

New infrastructure needs also arise in connection with the implementation of the Europe 2020 Strategy. Fostering Europe's transformation into a knowledge-intensive, low-carbon and highly competitive economy requires adequate modern and flexible energy, transport, and digital infrastructure networks. Through targeted investments in essential infrastructure, CEF will help to create jobs and boost Europe's growth and competitiveness.

Job creation is directly related to works such as construction, mechanical engineering, and business services. But it is also indirectly stimulated and induced by the economic effects of using new infrastructure. Investments in the energy transmission infrastructure that Europe needs until 2020 are expected to create 410,000 additional jobs, in the next decade. For Broadband infrastructure, the construction of high-speed Internet networks in Germany alone is expected to create almost a million jobs (968,000) between 2010 and 2020. In transport, infrastructure investments of about €200 billion could generate, up to 2020, about 650,000 additional jobs.

More generally, CEF investments will have a significant economic impact through its support to increasing the accessibility and improving the efficiency of network industries. Transport costs, for example, amount to between 2% and 10% of businesses' total costs, while households in the EU spend about 13% of their income on transport-related goods and services. Improved infrastructure connections will contribute to reducing these costs, with a significant effect on competitiveness and wealth. Improved energy transmission infrastructure by 2020 will translate into at least 0.42 percentage points of GDP increase in the EU, while just the deployment of eProcurement, an EU-wide digital service, could lead to an estimated minimum €50 billion euros of savings.

For more information on the EU 2020 Strategy: http://ec.europa.eu/europe2020/

2 "A new Strategy for the Single Market at the service of Europe's economy and society", Report by Mario Monti to the President of the European Commission, 9 May 2010.

۲

۲

 (\bullet)

THE CONNECTING EUROPE FACILITY IN CONTEXT

Synergies and simplification

CEF proposes a coordinated approach that will simplify procedures, reduce collective costs, and ensure the largest possible added value by optimising the portfolio of instruments available, by standardising the operational rules for using them, and by capitalising on possible synergies across the three sectors.

The shared infrastructure-specific financing instruments will make the financial instruments bigger, better structured and optimised from the risk management perspective. They will be therefore more cost efficient to run, as well as more visible and recognisable by the financial markets.

The costs of administration will be lowered, as the management of the dedicated sectoral funds under a common legal and procedural framework will help achieve significant economies of scale: a joint CEF committee (formed of representatives of the Member States' administrations), a shared executive agency, shared procedures, jointly organised calls for proposals.

Economies of scale will also be exploited at project level, by supporting synergies between the sectoral works. Energy, transport and broadband networks can share common facilities (such as manholes, ducts, access to premises), encouraging a coordinated deployment of passive

network elements . Synergies in project planning and permitting can also be exploited.

CEF and innovative financial instruments

CEF investments are also intended to act as a catalyst to attract further funding from the private sector and other public sector actors. As the current pressure on EU public budgets is likely to continue in the near future, a more systematic use of innovative financial instruments is required to leverage the impact of EU budgetary resources.

The CEF is designed to attract private sector investment to infrastructure through a number of financial risk-sharing instruments, including special lending, guarantees and equity investments. These instruments aim to give credibility to infrastructure projects and to lower their risk profiles. The goal is to offer an alternative to the traditional grant funding and to plug financing gaps for strategic infrastructure investments.



For more information on the EU 2020 Project Bond Initiative:

http://ec.europa.eu/economy_finance/financial_operations/investment/europe_2020/index_en.htm

۲

۲

THE CONNECTING EUROPE FACILITY IN CONTEXT

The Commission will work closely with the European Investment Bank (EIB) and other financial institutions to take advantage of capital market investors' interest in long-term investment opportunities with stable revenues. Following the in-depth assessment of market needs and its financing capacities, distinct financial instruments will be rolled out in cooperation with financial institutions.

The Europe 2020 Project Bond Initiative is one of the financial instruments proposed for CEF. The initiative, for which the pilot phase has been launched in 2012, is envisaged to become the main EU instrument to help the promoters of individual infrastructure projects attract private sector investors, in particular insurance companies and pension funds. This initiative will enable the issuance by project companies of long-term well-rated bonds instead of relying only on bank lending. The participation of the European Commission and the EIB will mitigate some of the risk associated with a project bond issued to finance a specific project. Member States, infrastructure managers or companies will therefore be able to access a competitive source of finance and consequently improve the cost of financing such projects.

The Europe 2020 Project Bond Initiative is thus expected to act as a catalyst to re-open the debt capital market – currently largely unexploited for infrastructure investments following the financial crisis – as a significant source of financing in the infrastructure sector. The aim is to attract private investment into a new class of European-wide infrastructure assets. Project bonds will also be one of the key EU financial instruments available within the CEF.

Project bonds: How does it work?

Let's take an example. A transport project, such as a section of railway network, is planned by a group of companies (sponsors) and tendered by public authorities. The sponsors create a project company to raise the financing, construct and operate the railway network for a period agreed with the public authorities. The sponsors provide own funds to the project company in the form of equity and shareholder loans. The remaining financing is obtained by the project company in the form of debt, traditionally a bank loan. This constitutes a so-called "senior debt". With the assistance of the Project Bond Initiative, instead of using traditional bank lending, the project company could raise the senior debt by issuing project bonds.

Capital market investors would buy the bonds if an investment grade credit rating, preferably at least A-, could be achieved. In order to support the project company to achieve such an attractive credit rating, the EIB will provide, in the framework of the Project Bond initiative, a loan or guarantee (the "Project Bond Instrument") to the project company. This Project Bond Instrument could cover all project-related risks affecting the cash flow generation from the start of the operating period, as well as any funding shortfall during the construction period. This will raise the likelihood of timely repayment of principal and interest to bond holders and, in turn, help reduce the risk of such bonds and increase correspondingly their credit rating.

Once drawn upon, the Project Bond Instrument will take the form of subordinated debt – i.e. it will rank after the senior debt tranche in terms of order of repayment, but before equity capital. As such, it will be reimbursed by the project company over time from the cash resources available after senior debt service, but prior to payments to equity and related financing (shareholder loans and other subordinated loans).

Funding from the EU budget (and in this particular case, from the CEF budget) will intervene by providing capital contributions to the EIB, in order to cover a portion of the risk the EIB is taking when it finances the eligible projects. This is already the case with other existing instruments, such as the Loan Guarantee Instrument for TEN-transport (LGTT). In other words, the EU budget will provide some risk cushion for the EIB to finance the underlying projects, while the EIB would have to cover the remaining risk. Through the EIB support of up to a maximum of 20% of project debt, a multiplier of around 15 to 20 can be achieved. Therefore, many more projects can be financed than with traditional grants.

۲

۲

 (\mathbf{r})

THE CONNECTING EUROPE FACILITY IN CONTEXT

Coordination with other sources of EU financial support

The European Commission will give particular care to ensuring complementarities with interventions supported by other EU programmes, while avoiding potential overlaps. In particular, coordination will be pursued in the implementation of the CEF with the Horizon 2020 research and innovation programme and the Cohesion and Structural Funds, where the Commission has proposed that important parts of the budget for 2014-2020 be dedicated to projects related to ICT, energy and transport infrastructure.

Coherence between CEF and the Horizon 2020 programme will guarantee that the research and innovation chain leading to deployment in infrastructure is not interrupted. This coherence is particularly critical at a time when significant technological advances in transport, energy and ICT will be needed to help the EU meet its ambitious Europe 2020 Strategy's objectives.

For more information on the Horizon 2020 Programme: http://ec.europa.eu/research/ horizon2020/

Within the **Cohesion and the Structural Funds**, the support to trans-European infrastructure networks in the three sectors remains central to the achievement of the objective of economic, social and territorial cohesion within the Union. The coordination between the specific trans-European networks' policy objectives and the corresponding cohesion policy objectives will be done primarily in the context of cohesion policy's main implementation instruments (the Common Strategic Framework, the Partnership Contracts, and the respective implementing Operational Programmes). Particular care will be taken to avoid overlaps, to maximise complementarity and to ensure the best possible use of Union support.

For example, the Structural Funds will support broadband roll-out projects where there is clearly no business case, while CEF financial instruments would help make specific projects commercially viable by ensuring lower interest rates and/or longer contract periods.

In transport, CEF investments will concentrate on cross-border projects and other projects of high EU added-value, as clearly pre-identified in the CEF Regulation Annex. Whereas Cohesion and Structural Funds support will be allocated to other projects on the TEN-T of more regional and national immediate impact.

This approach is mirrored in the case of energy infrastructures. CEF funding will concentrate on transmission projects with cross-border impact delivering the priority corridors laid out in the Guidelines. Cohesion and Structural Funds support can in turn assist the development of distribution networks (the "last mile" needed to deliver energy to the citizens) and other energy infrastructures which are essential for the economic development of the regions concerned.

For more information on the Cohesion and Structural Funds: http://ec.europa.eu/regional_policy/what/future/proposals_2014_2020_en.cfm

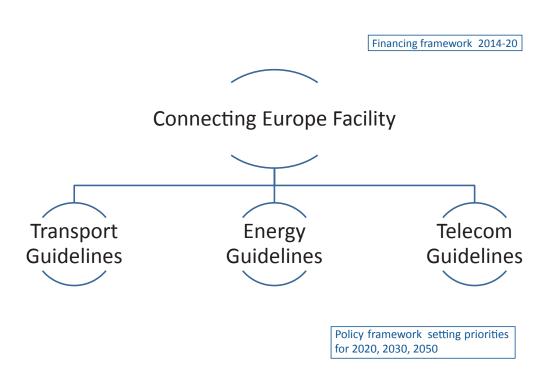


۲

 $(\blacklozenge$

HOW WILL CEF WORK?

CEF is part of a larger, new "European infrastructure package", as proposed by the Commission in October 2011. The package includes a set of revised policy guidelines setting the objectives and priorities of EU intervention in each of the three sectors of trans-European network development. The other main component is constituted by the CEF, as the common financial framework establishing the rules according to which EU financial support will be awarded to support these policy objectives. In other words, if with the CEF the European Commission proposes how the EU money should be spent, with the Guidelines it sets infrastructure priorities which this money should help deliver.



The management of EU funds under the CEF

CEF funds will be centrally managed, meaning that the programming of the use of funds, the selection of projects to be awarded financial support, the allocation of the funds and the control of the use of funds will be done directly by the Commission.

The use of funds is organised over the 7 years multiannual financial perspective by means of multi-annual and annual work programmes, to be adopted by the Commission after the approval of the Member States under the examination procedure. The work programmes detail proposal selection and award criteria, as well as the amount of funds concerned.

For the administration of the grants (non-refundable financial contributions) component of the fund, which will constitute the bulk of the CEF contributions, the Commission will be assisted by an Executive Agency. The support provided via innovative financial instruments will be managed by means of partnerships that the Commission will establish with the European Investment Bank (EIB) and other financial institutions.

۲

HOW WILL CEF WORK?

Management of grants

The award of financial support in the form of grants will be done by the Commission via a competitive process. Calls for projects will be organised regularly for both the annual and the multi-annual work programmes. The proposals will be evaluated by external experts on the basis of a clear set of criteria, including the quality, maturity and relevance to the specific objectives of the calls. The evaluation process will be based on two key principles: equal treatment – all proposals will be evaluated in the same manner against the same criteria; and transparency – adequate feedback will be given to applicants on the outcome of the evaluation of their proposals.

The Commission, assisted by an Executive Agency, will be also responsible for managing the technical and financial implementation of the programme. A strict monitoring and use-it-or-loseit rules will mean that funds which will not be used by a project within the specified period will be withdrawn from that project and returned to the CEF budget to be reallocated to other projects.

The repartition of tasks

European Commission	Executive Agency			
Defines the policy	Turns policy into action			
 Makes all CEF programming decisions Defines strategy, objectives and priority areas of action Selects the projects for co-financing and adopts the financing Decisions Evaluates the CEF programme and the Agency's performance 	 Follows up the technical and financial implementation of the projects Manages the entire project life cycle Executes the CEF budget Gives feed-back, assistance and reports to the Commission Provides administrative support to the beneficiaries of the CEF financing 			
	 Coordinates with other Commission services, programmes, Institutions and financial instruments 			

Support via innovative financial instruments

Unlike grants, the management of the funds to be allocated as EU financial support via financial instruments will not be done through calls for proposals. On the basis of the eligibility defined by the EU in the sectoral guidelines, the financial institution partnering with the Commission will select specific projects using standard eligibility criteria and credit risk policies, in order to optimise the use of the selected financial instrument(s) in the financing of the project. It will be for the financial institution, on the basis of the due diligence carried out, to ultimately decide whether to mobilise the instrument(s) or not.

CONNECTING EUROPE FACILITY ONE INSTRUMENT, THREE SECTORS

CEF Energy

A new policy framework

The proposed regulation on trans-European energy infrastructure guidelines (Guidelines) complemented by the Connecting Europe Facility constitute an unprecedented "Energy Infrastructure Package". It provides a great opportunity to pave the way for the Europe 2020 objectives, as it offers a perspective to develop the networks of the future. This requires a stronger focus on EU-wide priorities, a stable and incentivising investment climate, transparency, and open dialogue with citizens, and more efficient permit granting. Wherever the market cannot deliver on its own, and solidarity is required, CEF can provide financial aid from the Union's budget 2014-20, be it to connect so-called energy islands or to ensure security of supply.

The Guidelines include a new way of identifying energy infrastructure projects that can receive the label of Projects of Common Interest (PCI), which are necessary to implement the priority corridors and areas set out in the regulation (see below). The starting point for project selection will be the Ten-Year Network Development Plans (TYNDP) prepared by the European Networks of Transmission System Operators (ENTSO) for gas and for electricity. However, in a first phase, projects which are not part of the TYNDP will also be considered. In this context, the term energy infrastructure covers electricity transmission lines, gas, CO2 and oil pipelines, Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG) reception facilities and electricity and gas storage.

Furthermore, the Guidelines propose solutions to eliminating investment uncertainties and potential obstacles. Lengthy permit-granting procedures and public opposition are the main hurdles for infrastructure development, especially for overhead electricity lines. The Guidelines propose to introduce a binding overall time limit of 3 years and to concentrate the permit-granting powers or coordination in one single authority (one-stop-shop) and propose that Member States streamline their environmental authorisation procedures. To enhance public acceptance, the guidelines introduce rules on enhanced transparency. The objective is to render the process more efficient while safeguarding the EU's high standards in environmental protection.

Equally important for the implementation of energy projects are the regulatory solutions proposed. The Guidelines introduce a cost-benefit analysis (CBA) to clearly demonstrate cross-border benefits and proposes measured to allocate costs following the benefits. Proper allocation of costs between the Member States concerned by cross-border infrastructure projects, based on a joint understanding of the benefits of that project for each of them, will solve some of the problems encountered by projects today. In addition, the Guidelines propose that national regulatory authorities provide regulatory incentives commensurate to the risks incurred by such projects.

Finally, under the CEF regulation, support for studies and innovative financial instruments, such as project bonds, will be available to all PCIs to improve their bankability and reduce their cost of capital.

Projects in Ten-Year Network Development Plans (+additional projects in the period 2012/13) Projects of Common Interest, all eligible for financial instruments and grants for studies

Projects of Common Interest eligible for grants for works ۲

۲

 (\mathbf{r})

CONNECTING EUROPE FACILITY ONE INSTRUMENT, THREE SECTORS

Financing needs and priorities

The EU's energy infrastructure is aging and, in its current state, not suited to match future demand for energy, to ensure security of supply or to support large scale deployment of energy from renewable sources. The upgrading of existing, and development of new energy transmission infrastructures of European importance, will require investments of about 140 billion EUR in electricity and at least 70 billion EUR in gas.

This challenge and its urgency are unprecedented, as they combine cyclical reinvestment needs with new requirements – mainly due to rapidly increasing amounts of electricity generated from variable sources – arising from the EU's energy and climate policy objectives for 2020 and beyond. Between now and 2020, investment volumes in the different Member States will be multiplied by two, or even three compared to the last decade.

Although accelerated permitting and regulatory measures will "rescue" many projects, some 60-70 billion EUR of investment will still remain at risk unless public money is provided. Under current market and regulatory conditions some energy projects are not commercially viable, and would normally not make it into investment programmes of infrastructure developers³. The lack of commercial viability often stems from the inability to recover all the costs through tariffs. Such projects include the lifting of energy isolation, security of supply or innovative technological solutions.

The unprecedented investment volumes combined with the current context of the financial markets is yet another root of the investment gap. All Transmission System Operators (TSOs) will need to build more projects than in the past; many of them are expected to step up their investment plans even threefold. For many, it will be a major test of their financial strength and their ability to access long term financing needed for their projects. This is likely to be further aggravated by the increasing cost of financing as a consequence of the credit crisis and the regulatory measures which follow (Basel III, Solvency II).

The table below shows, for each priority corridor and thematic area set in the Guidelines, the estimated investment needs, the expected investment gaps and the amounts that are needed to stimulate the investment and prevent the gap. Even though the estimates are very conservative, nothing less than 9.12 billion EUR will suffice to make sure that the infrastructure Europe needs is built in time⁴.

The reasons behind the investment gap in each priority corridor vary. For some corridors, proportionally less public money will be required as their problems can be addressed best with financial instruments which are inherently less budget intensive.

CEF is engineered to address the investment gap in an efficient manner by providing solutions which are best suited to the needs of concrete projects, in line with their underlying economics. Financial instruments, by bringing in new classes of investors (pension and insurance funds) and mitigating certain risks, will help project promoters to access the necessary financing for their projects. Direct subsidies, i.e. grants, will be applied to fill in the gaps in commercial viability of the projects that are particularly relevant for Europe. The use of grants to support construction costs of will be strictly restricted to situations where regulatory solutions prove insufficient and financial instruments cannot help adequately. Strict procedures laid out in the Guidelines will be applied to verify that projects applying for grant support suffer from commercial viability despite their very strong positive externalities and that the regulatory solutions have effectively been exhausted.

For more information on the "Energy Infrastructure Package": http://ec.europa.eu/energy/ infrastructure/strategy/2020_en.htm

CONNECTING EUROPE FACILITY ONE INSTRUMENT, THREE SECTORS

Priority corridors	Total investment need (€billion)	Estimated Investment gap (€billion)	Average co- financing ratio need	Likely need for funding (€billion)
Northern Seas offshore grid	30	8	0.10	0.80
North-South electricity interconnections in Western Europe	30	5	0.10	0.50
North-South electricity interconnections in Central Eastern and South Eastern Europe	40	12	0.20	2.40
BEMIP electricity	5	3	0.50	1.50
North-South gas interconnections in Western Europe	20	1	0.10	0.10
North-South gas interconnections in Central Eastern and South Eastern Europe	26	5	0.20	1.00
Southern Gas Corridor	22	8	0.10	0.80
BEMIP gas	3	2	0.50	1.00
Oil supply connections in Central Eastern Europe	n.a.	n.a.	0	0.00
Priority thematic areas				
Smart grids deployment	40	20		1.00
Electricity highways	included in electricity corridors			
Cross-border carbon dioxide network (if technology viable)	2.5	2		0.02
TOTAL	218.5	66		9.12

These are approximate figures, mainly from the European Commission's DG ENER, calculations based on data from PRIMEs (as a partial equilibrium model for the European Union energy markets, PRIMES is used for forecasting, scenario construction and policy impact analysis up to the year 2030), European Network of Transmission System Operators (ENTSOs), KEMA etc

۲

13

 $(\blacklozenge$

CONNECTING EUROPE FACILITY ONE INSTRUMENT, THREE SECTORS

CEF Digital

The new Telecommunications Guidelines

In the context of the Europe Infrastructure Package, the European Commission has proposed for the first time a series of guidelines covering the objectives and priorities for broadband networks and digital service infrastructures in the field of telecommunications. The establishment of crossborder access to an interoperable, digital public service infrastructure is an area where the EU can add considerable value. The guidelines identify projects of common interest for the deployment of high-speed broadband networks and digital service infrastructures, aimed at improving the competitiveness of the European economy—particularly of small and medium sized enterprises promoting the interconnection and interoperability of national networks as well as access to such networks, in pursuit of a Digital Single Market.

Needs and objectives

The Internet is becoming the dominant platform for communication, services, and business. The availability of high-speed broadband Internet and access to digital service infrastructures are the building blocks of a modern Single Market. ICT investment has so far had the highest correlation with growth: 10% more households connected to high-speed broadband can generate up to 1.5% higher GDP and 20 million extra jobs by 2020. Entire new growth -creating markets such as cloud computing, the "internet of things", or big data applications can exploit their potential only if high-speed broadband is available.

CEF Digital is anchored to the Europe 2020 Strategy for smart, sustainable, and inclusive growth, which put digital infrastructures at the forefront with the "Digital Agenda for Europe" (DAE) initiative. The DAE underlines the need to ensure high-speed broadband for all and to facilitate investment in these new networks that are the arteries of our digital economy. Through the DAE, the EU has set itself ambitious targets for high-speed broadband roll-out and take-up by 2020.

CEF Digital will encourage investment in networks capable of achieving, by **2020,** the DAE targets of universal coverage at 30Mbps and of at least 50% of households subscribing to speeds above **100 Mbps**

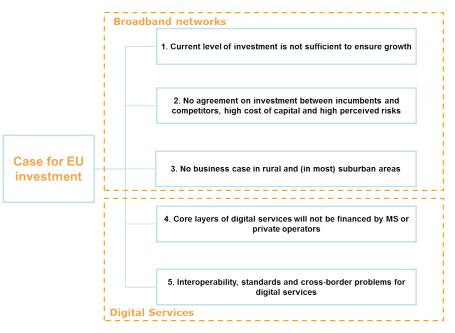
14

 (\bullet)

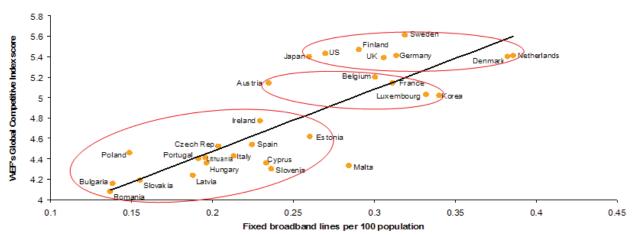
CONNECTING EUROPE FACILITY ONE INSTRUMENT, THREE SECTORS

Broadband Internet Access

Major investments in network deployment will be necessary over the next 5 to 10 years (some €200 billion according to estimates) to put in place a 21st century ubiquitous high-speed broadband infrastructure and to close the gap with Europe's leading competitors (e.g. Japan, Korea and China). The private sector will make the bulk of these investments, particularly in densely populated areas (so-called "black" areas). In contrast, sparsely inhabited areas (so-called "white" areas), where the business case is less evident will rely on Structural Funds and other national/regional public grants. CEF Digital will intervene in the so-called "grey" areas in the middle, using financial instruments to help mitigate the risks, and thereby making these high-speed broadband projects commercially viable.



High-speed broadband investments create jobs in the short term as they are installed, but the transformative impact is in their boost to productivity, in the modernisation of public administration, and in the improvements to the quality of life by tackling the exclusion of isolated communities, or by enabling new applications in eHealth. High-speed broadband investments generate a higher sustainable level of employment in all sectors of the economy; according to the OECD, an increase in 10% of broadband take-up in any year results in a growth of 1.5% in labour productivity over the following five years.

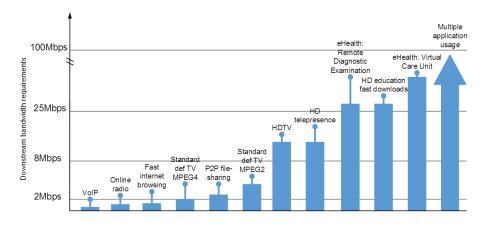


Correlation Fixed Broadband Penetration and Competitiveness

۲

CONNECTING EUROPE FACILITY ONE INSTRUMENT, THREE SECTORS

Ten years ago, dial-up was the standard, DSL was under development and neither YouTube, nor Facebook or Skype existed. Without basic broadband, these platforms would have never been created. We cannot predict which new platforms will be developed by 2020, but one thing is clear: they will need more bandwidth than we have now. High Definition TelePresence requires at least 24 Mbps, eHealth applications need up to 100 Mbps, and cloud computing depends on high-speed symmetrical connections. Just as dial-up is now obsolete, first generation broadband networks will soon become a relic of the past and Europe cannot lag behind.



Source: Analysis based on Broadband Stakeholder Group

Role of Financial Instruments

In contrast to the domains of transport and energy, CEF Digital will deploy predominantly financial instruments to roll-out the high-speed network throughout Europe, rather than focusing on grants. Grants, however, will be used for technical assistance and for the development of Digital Services; hence CEF Digital will be managed in close coordination with the Structural Funds, which offer grant support.

The credit shortage and the new regulatory requirements of Basel III currently limit the appetite of commercial banks for exposure to infrastructure financing. CEF Digital will enable the European Investment Bank (EIB) to fill this gap by taking on more risk in the broadband infrastructure sector. Thanks to these financial instruments, the CEF will be almost budget-neutral and have a high leverage effect (one Euro of EU investment will trigger between 5 and 10 Euro of private investment).. Operators, in particular those where the investment climate is particularly harsh, will in turn benefit from lower interest rates due to the EIB's AAA rating. Time-to-market with CEF is likely to be much shorter than with structural funds, if only because support through financial instruments does not qualify as state-aid, clearances for which can easily take up to two years.

Digital Service Infrastructures

In today's internal market, digital services stop at borders. Businesses can rarely send a procurement bid to an administration in another country due to the lack of seamless electronic procurement systems. Doctors treating individuals who fall sick while travelling or living in another member-state have trouble retrieving their patient's medical records.

The fragmentation of systems is a major obstacle to the emergence of a Digital Single Market, hampering the growth of cross-border services and imposing needless transaction costs on pan-European companies as well as mobile Europeans.

16

۲

CONNECTING EUROPE FACILITY ONE INSTRUMENT, THREE SECTORS

CEF Digital Service Infrastructures will act as platforms on which new industries can create innovative applications, and also build digital bridges to facilitate the mobility of citizens and businesses working across borders. In addition, pan-European digital services will modernise public services (e.g. eGovernment, eProcurement, and eHealth), de-fragment the market by doing away with language barriers, ensure a higher level of safety on the Internet, and help governments, companies, and citizens save enormously on administration and paperwork.



CEF Digital Service Infrastructures: some examples

Data.eu will make available across Europe public sector data, such as geographical information, statistics, business information, archives and publicly funded research, the total value of which is estimated at €140 billion annually.

In the business world, companies seeking to expand into other countries often struggle to comply with regulations or completing administrative proceedings. But thanks to CEF Digital Services, they will soon have seamless, streamlined electronic procedures instead.

With eProcurement, the public sector—the largest buyer of services in the EU—will be able to procure more cheaply via an interoperable EU-wide system. eProcurement will enable companies to respond to tenders and sign documents on the internet from any member-state.

Language barriers prevent consumers from enjoying the benefits of a digital single market. CEF Digital will help remove this obstacle, enabling web content and website functionalities to be translated into other languages, quickly and accurately.

A Belgian Erasmus student will be able to enrol online in an Italian university, since CEF Digital Service Infrastructures will allow the Italian university to read and accept a Belgian electronic identity card in a safe and secure environment.

Through the network of Safer Internet Centres, CEF will support the only pan-European network of public actors and NGOs fighting against child abuse on line.

For more information on CEF digital: http://ec.europa.eu/digital-agenda

۲

۲

CONNECTING EUROPE FACILITY ONE INSTRUMENT, THREE SECTORS

CEF Transport

A new policy framework

The revised policy guidelines for the trans-European transport network (the TEN-T Guidelines) propose a new planning of the TEN-T development, at two levels. The first level is constituted by a larger, basic network, called the "comprehensive network". This network includes the relevant existing and planned infrastructure in the Member States, and its outline is the result of the updating and adjustment of the existing TEN-T map. The second level (or layer) is constituted of the strategically most important parts of the TEN-T. It was identified on the basis of a specially designed European methodology, and it is titled the "core network".

The comprehensive network will ensure effective access to and from the core network to all citizens and businesses in the EU. It will ensure that the implementation of the TEN-T policy will contribute to territorial cohesion and will provide accessibility for all regions, including peripheral and ultra-peripheral regions of the Union.

The date for the completion of this wide covering network, deploying high quality and safety standards, has been set for 2050.

The **core network** will be formed of those parts of the TEN-T that carry the main concentration of trans-national traffic flows for both freight and passengers. It will ensure the effective connectivity of the Eastern and Western parts of the Union and of its peripheral regions to the central ones. It will provide efficient multi-modal links between the EU capitals, the main socio-economic centres and the main ports and airports of the Union.

Due to its strategic importance, its completion has been given priority. 2030 has thus been set as the target for the full completion of the core network.

> Ten multimodal corridors will help ensure the coordinated implementation of the core network. They will provide a platform for capacity management, investments, building and coordinating multimodal transhipment facilities, and deploying interoperable traffic management systems.

The methodology is described in a publicly available document, http://ec.europa.eu/transport/ infrastructure/doc/web_methodology.pdf

۲

 $(\mathbf{0})$

CONNECTING EUROPE FACILITY ONE INSTRUMENT, THREE SECTORS

The revised TEN-T Guidelines also propose a reinforced approach to coordination in the development of the trans-European transport network. A number of corridors, drawing on the core network, have been identified, following the main trans-European traffic flows. Development and implementation of the infrastructure along the corridor will be ensured by corridor structures that will bring together the Commission, the interested Member States, regions and local authorities as well as infrastructure managers, transport operators and, of course, the financiers. These structures will be placed under the aegis of a European Coordinator, responsible for overall coordination issues and ensuring transparency and accountability in the implementation of a specific corridor.

Finally, the new policy approach will place greater emphasis on ensuring

- effective interconnectivity across borders cross-border links, and between modes multimodal platforms;
- effective interoperability wide deployment and interoperability of intelligent traffic management systems;
- and enhanced safety and environmental friendliness of transport infrastructure by promoting innovative technological developments.

Financing needs and priorities

The cost of infrastructure development in EU Member States for the period 2010-2030, needed to match the demand for transport, has been estimated at over \in 1.5 trillion. By 2020, investment needs on the TEN-T are estimated at about \in 500 billion. Of this, \in 250 billion would be needed to complete missing links and remove bottlenecks on the core network.

For the period 2014-2020, the Commission has proposed that \leq 31.7 billion be invested, via the CEF, to support the TEN-T development. This includes \leq 10 billion ring fenced in the Cohesion Fund exclusively for transport projects in the countries eligible to the Cohesion Fund. The remaining \leq 21.7 billion will be available for all Member States, including those eligible to Cohesion Fund support, for investing in TEN-T infrastructure.

CEF investments will focus in particular on projects with high EU added value, such as building missing cross-border links and removing bottlenecks along main trans-European transport corridors. Priority will also be given to transport modes that are less polluting, to the deployment of telematics applications and the use of innovative technologies. The aim is thus to contribute to making the European transport system more sustainable, more efficient and give consumers more choice about how they want to travel.

Targeted investments in strategic EU added-value infrastructure

Investments in key infrastructures with strong EU added value can boost Europe's competitiveness in a difficult economic context, marked by slow growth and tight public budgets. Since the core network has been identified as that part of the TEN-T carrying the strategically most important European transport flows, CEF support will be targeted primarily to core network projects.

In order to concentrate EU intervention even further, the Commission, in close consultation with the Member States, has pre-identified a list of projects towards which 80% to 85% of the total €31.7 billion CEF financial support for transport will be focused. This list, annexed to the CEF proposal, includes:

- "Horizontal priorities" for TEN-T development, namely innovative traffic management systems and services for all modes;
- projects identified along the ten core network multimodal corridors;
- projects on the core network, mainly cross-border sections and bottlenecks, which are not part of Corridors.

The remaining 10% to 15% will be dedicated primarily to other projects on the core network.

۲

19

CONNECTING EUROPE FACILITY ONE INSTRUMENT, THREE SECTORS

Grants – direct EU support

The support for TEN-T projects will take mainly the form of grants. Non-refundable EU contributions are necessary to help develop projects of important European added value, but for which the available national, regional public and private resources are not sufficient. Identified according to a specific network planning methodology taking a marked European perspective, the core network infrastructures have an inherent, recognised EU added value. Grants may amount to up to 50% of the total project implementation costs, depending on the type of project. The maximum rates have been established in the CEF Regulation, reflecting the anticipated added value to the development of the TEN-T network as a whole and the difficulties the experience has shown that certain types of projects may encounter.

Types of Projects		All Member States	Member States eligible for Cohesion Fund
Studies (all)		50%	50%
Works on			
Rail	Cross border Bottleneck Other projects of common interest	40% 30% 20%	80-85% 80-85% 80-85%
Inland waterways	Cross border Bottleneck Other projects of common interest	40% 30% 20%	80-85% 80-85% 80-85%
Inland transport connections to ports and airports (rail and road) Development of ports		20% 20%	80-85% 80-85%
Development of multi-modal platforms		20%	80-85%
Reduce rail freight noise by retrofitting of existing rolling stock		20%	20%
Freight transport services		20%	20%
Secure parkings on road core network Motorways of the sea		20% 20%	20% 20%
Traffic management	ERTMS (rail) Other modes	50%	80-85%
Cross border road sections			80-85%

۲

 (\mathbf{r})

CONNECTING EUROPE FACILITY ONE INSTRUMENT, THREE SECTORS

Innovative financial instruments – leveraging EU investments

Since 2009, the LGTT has financed projects in rail, road and maritime in several European countries, including France, Portugal, Germany and the UK. In summer 2011, the largest LGTT deal to date was signed for the construction and operation of a 300 km high speed rail link between Tours and Bordeaux in France. The \notin 200million LGTT supported \notin 3 billion senior debt and \notin 7.8 billion total investment and proved decisive to attract senior lenders while ensuring a better protection of the state guarantee.

The European Commission will build on the financial instruments put in place under the current financial framework in cooperation with the EIB, such as the Loan Guarantee Instrument for trans-European transport network projects (LGTT). One other such instrument is the Project Bond Initiative, which has been developed building on the experience acquired with the LGTT. Following the successful completion of the Pilot Phase of the Project Bond Initiative, the two instruments will be used in parallel within the CEF framework.

Widening the portfolio of available financial instruments is also seen by stakeholders as a means to better adjust EU support to the particular needs of a project, to enable effective project structuring and to attract new investors. For transport infrastructure, a market uptake of \in 2 billion is estimated. With an expected multiplier effect of 1:15 to 1:20, the access to capital for the investments needed will be substantially enhanced.

A special mechanism for projects in Member States eligible to Cohesion Fund support

For the 2014-2020 financial period, the European Commission has proposed that €10 billion be transferred from the Cohesion Fund, to be managed according to central management rules (including eligibility rules, closer monitoring and the application of the use-it-or-lose-it principle) and focused on the high EU added-value objectives and priorities as defined for the CEF transport.

The funds will be however earmarked exclusively for TEN-T infrastructure projects in the Member States eli¬gible to the Cohesion Fund and will be made available in addition to financing from the rest of the proposed CEF transport budget of €21.7 billion. Moreover, projects supported with financing from these exclusively earmarked funds will benefit of more favourable financial support conditions, comparable to those provided by the Cohesion Fund – a higher co-funding rate of up to 85% for all types of eligible projects. By contrast, when accessing financing from the CEF budget open to all Member States, the general CEF transport co-financing rates will apply (see table on page 20) and the projects will need to compete with the proposals coming from all Member States on equal basis.

Currently, transport bottlenecks and missing links affect in particular the East and South-East to West connections – with important consequences for the capacity to economic growth of the countries in these areas, and the mobility of their citizens. The objective of this mechanism – of managing within CEF funds earmarked from the Cohesion Fund – is to ensure that the projects needed to remove these obstacles to the proper physical integration to the Single Market are realised also in the Cohesion Member States.

Without this mechanism, CEF will run the risk of being an instrument used in effect only by the economically more advanced Member States of the Union. That is, those countries that can afford to finance highly complex and costly project infrastructures up to a minimum of 60% of the total project cost. Without funds transferred from the Cohesion Fund, the CEF could not provide preferential, higher co-funding rates that would make these projects more affordable to those Member States whose economies are yet to catch up with those of the group of more advanced Member States.

For more information on the TEN-T policy revision and CEF transport: http://ec.europa.eu/ transport/infrastructure/revision-t_en.htm ()

۲

TEN-T CORE NETWORK INCLUDING CORE NETWORK CORRIDORS

© European Commission,

DG MOVE, TENtec Information System 2012 Ref. EC Proposal COM(2011) 650 final/3 Feb 2012 and COM(2011) 665 Oct. 2011



TEN-T "horizontal priorities"

a. Single European Sky – SESAR for air transport;

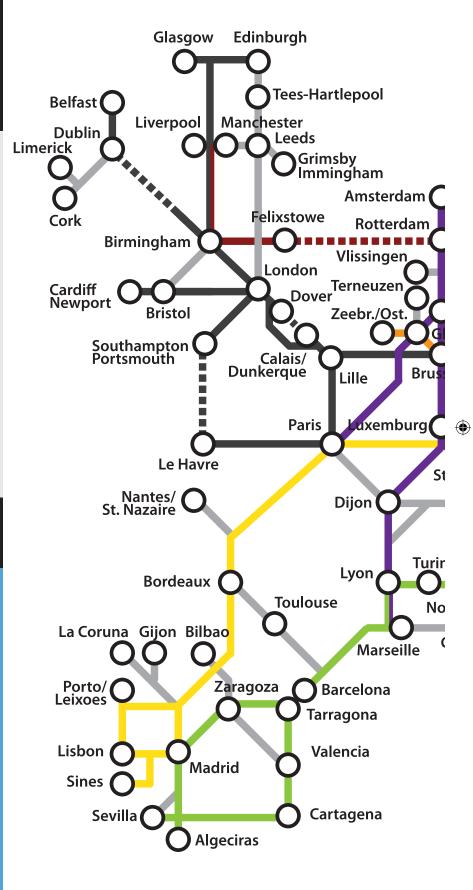
b. Intelligent Traffic Systems (ITS) for road;

c. European Rail Traffic management System (ERTMS) for rail;

d. River Information System (RIS) for inland water ways;

e. Innovative management systems and services for core network ports and airports;

f. Vessel Traffic Management Information Systems for maritime transport and Motorways of the Sea





Contact details:

European Commission – Directorate General for Energy Directorate B - Internal Energy Market Unit B1 - Internal Market I: Networks & Regional Initiatives http://ec.europa.eu/energy

European Commission – Directorate General for Communications Network. Content and Technology Directorate B - Electronic Communications Networks and Services Unit B5 - Broadband http://ec.europa.eu/dgs/connect

European Commission – Directorate General for Mobility and Transport Directorate B – European Mobility Network Unit B1 – Trans-European Network Sector B1.001 - OMC: TENtec & Innovation Unit B4 – Connecting Europe – Infrastructure Investment Strategies http://ec.europa.eu/transport ۲

۲