



# Is the EU investing wisely in transport?

Explanatory Note



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# 1 Introduction

Transport & Environment (T&E) wants to ensure that future EU contributions to transport (infrastructure) projects help to decarbonise transport and wants to ensure that this is accounted for in the post-2020 Multiannual Financial Framework as well as in the extended European Fund for Strategic Investments, referred to as EFSI 2.0.

T&E therefore wants to get an understanding of the infrastructure projects the EU is currently financially contributing to and has commissioned a study with the objective to give an overview of the ten largest EU contributions to individual transport (infrastructure) projects in specific areas for the period 2014-2020.

In this explanatory note, lists with these projects are presented in a table per specific area together with a description of the underlying approach.

## 2 Approach

### 2.1 Introduction

In this chapter we give an overview of the funding facilities included in the analysis, the scope of the analysis, the data sources used as well as the method that has been applied to set up the project lists.

### 2.2 Funding facilities

The EU contributes to transport infrastructure projects by means of different facilities and funds. The main instruments in this context are:

1. Connecting Europe Facility (CEF) Transport:
  - a Two of the five European structural and investment funds (ESIFs).
  - b A Cohesion fund (CF).
2. European Regional Development Fund (ERDF).
3. European Fund for Strategic Investments (EFSI).

CEF Transport, CF and ERDF support projects mainly by means of grants/ non-repayable funds, whereas for the EFSI it holds that the European Investment Bank (EIB) mainly grants loans.

For the 2014-2020 period, the following countries are eligible for CF funding: Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia and Slovenia.

### 2.3 Scope

#### Seven categories

The scope of the project are transport related projects supported by CEF Transport, CF, ERDF, and EFSI. The following different areas are thereby distinguished:

- 1a Transport infrastructure (overall category, summarising 1b-1f).
- 1b Road expansion.
- 1c New railway infrastructure.
- 1d Airport expansion.
- 1e Urban transport projects.
- 1f EFSI projects.
- 2 Transport-specific alternative energy projects.



1a thereby summarises the ten projects with the largest EU contributions out of the five (1b-1f) transport infrastructure categories.

### Time period

In the analysis, transport related projects that have been approved for/in the period 2014-2020 are considered.

CEF calls relevant for this study are:

- CEF Transport call in September 2014;
- CEF Transport call in November 2015;
- CEF Transport call in October 2016;
- and CEF synergy (transport and energy) call in September 2016.

However, the selection decision of some of these calls has not been published yet which is why we could only consider the projects as published in the following selection decisions:

- Selection Decision under the Multi-Annual Work Programme, 5 August 2016;
- Selection Decision under the Annual Work Programme 2014, 31 July 2015;
- Selection Decision under the Multi-Annual Work Programme, 31 July 2015.

### Type of projects

Under CEF Transport, studies, works and mixed projects (study + works) are eligible for funding. The focus of the analysis however is not on studies, but on actual concrete infrastructure projects which is why only works and mixed projects have been considered, i.e. projects with project numbers ending on 'W' and 'M'. Projects related to traffic management (Table 1) have therefore been discarded too.

Table 1 CEF Transport categories related to traffic management

Name	Description
SESAR	Traffic management and control systems for safe and efficient aviation
RIS	River Information Services (RIS) and its related projects involve traffic management infrastructure on the inland waterway network
ERMTS	Traffic Management Systems (TMS) are solutions to apply information and communication technologies to the transport sector
ITS Road	Innovative technology for more efficient road use

Focus of the study (Categories 1a-1f) is also on projects that lead to the expansion of capacity, so road expansion, new railway infrastructure, and airport expansion.

Rail and road projects related to an upgrade, modernization, optimization or reconstruction do not result in an increase in capacity and have thus, as far as possible, been excluded.

Maintenance of roads and rails has also been excluded, whereas projects that include the procurement of new trains or wagons have been included.

Regarding ESIF (CF and ERDF), the nineteen intervention field dimensions as indicated in Table 10 in the Annex have been considered relevant for the purpose of the study.



### **Type of instrument**

CEF, CF, and ERDF support infrastructure projects mainly by means of grants/ non-repayable funds; in the project, transport projects that have been supported by alternative instruments (i.e. other than grant) with CEF Transport means (less than 10% of the CEF Transport budget) have not been considered due to data availability.

The EIB mainly grants loans within the framework of the EFSI. The loans approved/granted by the EIB are considered the EU support in this study.

### **Level of aggregation**

The level of aggregation differs between CEF Transport, EFSI, and ESIF.

CEF publishes the selection decision for individual projects, EFSI partially for individual projects, partially only for funds that in turn will support different, not individually specified projects, while ESIF funds are not published allocated to individual projects.

ESIF funds are published on country and operational programme level, together with the country 2014-2020 targets (e.g. km of new roads in total) and subdivided by intervention fields.

The ESIF viewer<sup>1</sup> provides a breakdown of the countries' operational programmes over the countries' regions. For national or multi-regional projects however, the tool only provides an estimated and not an actual distribution to the regions. Since projects with large EU contributions are not regional but mainly national projects, the tool unfortunately does not allow projects relevant for this study to be allocated to individual/regional projects.

Transport related projects that receive ESIF funding are therefore considered in the project on the following level: a project is a country's 2014-2020 operational programme subdivided by intervention field dimension.

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<sup>1</sup> <http://s3platform.jrc.ec.europa.eu/esif-viewer>



## 2.4 Data sources

Table 2 summarizes the data sources used in the project and the number of respective relevant (see ‘Type of projects’) projects.

Table 2 Data sources and number of relevant projects

Fund	Source	Link	Number of relevant projects
CEF Transport	List of proposals selected for receiving EU financial assistance in the field of CEF-Transport sector following the 2015 calls for proposals based on the Multi-annual Work Programme 2014-2020 (August 2016)	<a href="https://ec.europa.eu/transport/sites/transport/files/themes/infrastructure/reference-documents/docs/2016/c_2016_5047_f1_annex_en_v1_p1_857347.pdf">https://ec.europa.eu/transport/sites/transport/files/themes/infrastructure/reference-documents/docs/2016/c_2016_5047_f1_annex_en_v1_p1_857347.pdf</a>	29
	List of proposals selected for receiving EU financial assistance in the field of CEF-Transport sector following the call for proposals based on the Annual Work Programme (July 2015)	<a href="https://ec.europa.eu/transport/sites/transport/files/themes/infrastructure/reference-documents/docs/selection-decisions/2015-07-31-cef-awp-selection-decision-annex.pdf">https://ec.europa.eu/transport/sites/transport/files/themes/infrastructure/reference-documents/docs/selection-decisions/2015-07-31-cef-awp-selection-decision-annex.pdf</a>	6
	List of proposals selected for receiving EU financial assistance in the field of CEF-Transport sector following the calls for proposals based on the Multi-annual Work (July 2015)	<a href="https://ec.europa.eu/transport/sites/transport/files/themes/infrastructure/reference-documents/docs/selection-decisions/2015-07-31-cef-mawp-selection-decision-annex.pdf">https://ec.europa.eu/transport/sites/transport/files/themes/infrastructure/reference-documents/docs/selection-decisions/2015-07-31-cef-mawp-selection-decision-annex.pdf</a>	46
ESIF	European structural and investment funds 2014-2020, categorisation Data	<a href="http://ec.europa.eu/regional_policy/en/policy/evaluations/data-for-research/">http://ec.europa.eu/regional_policy/en/policy/evaluations/data-for-research/</a>	531
EFSI	EFSI project list - Signed projects, approved projects and pre-approvals were included	<a href="http://www.eib.europa.eu/efsi/efsi-projects/index.htm?c=&amp;se=5">www.eib.europa.eu/efsi/efsi-projects/index.htm?c=&amp;se=5</a>	22
<b>Total</b>			<b>634</b>

For specific information about the projects, additional data sources were consulted, e.g. the online CEF Transport database, as indicated in the enclosed Excel file.

## 2.5 Method

The lists of the projects with the ten largest EU contributions in the different areas have been generated by selecting relevant projects from the documents as specified under Section 2.4 and by generating one longlist of relevant projects. These projects were then categorized using the seven categories given by T&E and subsequently ranked by EU financial contribution per category.

### Selection of relevant projects

Projects that receive funding from CEF Transport are all transport related projects. This is not the case for projects that can receive funding from EFSI and ESIF. For these facilities transport related projects have been filtered out.



The EFSI projects were filtered by sector as specified by the EIB. Any project that mentioned the word transport in the description of the sector was initially included. It was noted that some projects were not concrete transport projects. These projects were investment funds whose descriptions showed they invested in a multitude of aspects, including transport. Any projects investment funds that did not explicitly specify what percentage of their funding was spent on transport were excluded.

ESIF projects were filtered by means of the intervention field dimensions. Please see Table 10 in the Annex for the dimensions considered in the study.

### **Categorisation of projects**

The transport related, relevant projects have been categorised in different ways.

For the CEF Transport facility, an overview of the projects per transport mode is provided by the Commission<sup>2</sup> which allows the categorisation of the projects for Categories 1b-1d. For the urban transport projects (1e) and the alternative fuels project category (2), which is not a pre-defined category, the projects for all transport modes have been categorised manually.

The EIB does not provide subcategories for the EFSI transport related projects which is why the categorization of the projects has been carried out manually.

The projects that have received/will receive ESIF support have been categorised by means of the intervention field dimensions as specified in Table 10 in the Annex. This categorisation, however, does not allow to distinguish alternative fuel projects; the project descriptions do also not allow a manual categorization which is why no projects supported by ESIF have been considered in this category.

### **Assumptions**

In the analysis the following assumptions have been made:

1. Multimodal transport projects have been allocated to one transport mode which is rail.
2. If for a programme that has received an ESIF contribution more than one contribution has been specified per intervention field dimension these contributions have been added up, assuming that these are related to one project.
3. The ESIF dataset used in the study does specify the EU contributions related to an intervention field in a programme but not the according total costs. The related total costs have therefore been estimated, using the proportion of EU funds to the total as specified for the respective overall programme as specified in the ESIF\_FINANCE\_2014-2020 dataset. For instance all projects of the OP Infrastructure and Environment programmes in Poland have a proportion of 80-85% of EU funds to total costs. The average of this range has then been used to estimate the total costs related to the EU contribution specified per intervention field dimension.
4. The EIB mainly grants loans within the framework of the EFSI. The loans approved/granted by the EBI are considered the EU support in this study. The actual public support is the advantage of the EIB beneficiary compared to the case that the loan is provided by a commercial bank which is probably less than the EIB loan.

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<sup>2</sup> <https://ec.europa.eu/inea/connecting-europe-facility/cef-transport/projects-by-transport-mode>



### 3 Results

The seven following tables show the main characteristics of the ten projects that have received the largest EU contributions in a specific area. In the Excel file enclosed detailed information per project is given.

#### 3.1 Transport projects

Table 3 Ten largest EU contributions to transport infrastructure projects (1a = 1b-1f)

Project	EU contribution	Fund	Mode impacted	Country
OP Infrastructure and Environment - TEN-T motorways and roads: Core network	€ 4,362,229,856	ESIF	Road	Poland
OP Infrastructure and Environment - TEN-T motorways and roads: Comprehensive network	€ 4,332,674,292	ESIF	Road	Poland
OP Infrastructure and Environment - TEN-T comprehensive railways	€ 2,535,163,380	ESIF	Rail	Poland
OP Infrastructure and Environment - Clean urban transport infrastructure	€ 2,158,540,780	ESIF		Poland
Large Infrastructure Operational Programme - TEN-T motorways and roads: Core network	€ 2,017,409,932	ESIF	Road	Romania
Sustainable growth ERDF 2014-20 OP - TEN-T core railways	€ 1,469,704,098	ESIF	Rail	Spain
Large Infrastructure Operational Programme - TEN-T core railways	€ 1,310,848,724	ESIF	Rail	Romania
OP Infrastructure and Environment - Secondary road links to TEN-T road network and nodes	€ 1,268,106,576	ESIF	Road	Poland
OP Infrastructure and Environment - Other railways	€ 1,247,528,595	ESIF	Rail	Poland
Integrated Infrastructure - TEN-T motorways and roads - Core network (new build)	€ 1,197,000,000	ESIF	Road	Slovakia
	€ 21,710,857,509			





## 3.2 Road expansion

Table 4 Ten largest EU contributions to road expansion (1b)

Project	EU contribution	Fund	Country
OP Infrastructure and Environment - TEN-T motorways and roads: Core network	€ 4,362,229,856	ESIF	Poland
OP Infrastructure and Environment - TEN-T motorways and roads: Comprehensive network	€ 4,332,674,292	ESIF	Poland
Large Infrastructure Operational Programme - TEN-T motorways and roads: Core network	€ 2,017,409,932	ESIF	Romania
OP Infrastructure and Environment - Secondary road links to TEN-T road network and nodes	€ 1,247,528,595	ESIF	Poland
Integrated Infrastructure - TEN-T motorways and roads: Core network	€ 1,122,500,000	ESIF	Slovakia
Transport - New build of national and regional roads	€ 812,085,425	ESIF	Czech Republic
Transport - TEN-T motorways and roads - Comprehensive network (new build)	€ 573,835,206	ESIF	Czech Republic
Operational programme "Transport and transport infrastructure" - TEN-T motorways and roads - Core network (new build)	€ 572,343,630	ESIF	Bulgaria
Integrated Transport OP - TEN-T motorways and roads - Comprehensive network (new build)	€ 500,000,000	ESIF	Hungary
Large Infrastructure Operational Programme - TEN-T motorways and roads - Comprehensive network (new build)	€ 493,154,612	ESIF	Romania
	€ 16,033,761,548		

## 3.3 New railway infrastructure

Table 5 Ten largest EU contributions to new railway infrastructure (1c)

Project	EU contribution	Fund	Country
OP Infrastructure and Environment - TEN-T comprehensive railways	€ 2,535,163,380	ESIF	Poland
Sustainable growth ERDF 2014-20 OP - TEN-T core railways	€ 1,469,704,098	ESIF	Spain
Large Infrastructure Operational Programme - TEN-T core railways	€ 1,268,106,576	ESIF	Romania
OP Infrastructure and Environment - Other railways	€ 1,197,000,000	ESIF	Poland
Transport - TEN-T comprehensive railways	€ 966,916,303	ESIF	Czech Republic
Brenner Base Tunnel Works	€ 878,640,000	CEF	Austria, Italy
OP Infrastructure and Environment - TEN-T core railways	€ 834,144,100	ESIF	Poland
The rehabilitation of the Brasov-Simeria Railway component of the Rhine-Danube Corridor	€ 826,406,191	CEF	Romania



Project	EU contribution	Fund	Country
Cross border section of the New Lyon-Turin Rail Link - Mont Cenis Base Tunnel	€ 813,781,900	CEF	France, Italy
National Operational Programme on Infrastructures and Networks - TEN-T core railways	€ 660,849,632	ESIF	Italy
	€ 11,450,712,180		

### 3.4 Airport expansion

Table 6 Ten largest EU contributions to airport expansion (1d)

Project	EU contribution	Fund	Country
Greek Regional Airports PPP	€ 300,000,000	EFSI	Greece
CPH Airport Expansion TEN-T	€ 168,000,000	EFSI	Denmark
Competitiveness and Cohesion OP - TEN-T Airport	€ 100,000,000	ESIF	Croatia
Transport Infrastructure, Environment and Sustainable Development OP - TEN-T Airport	€ 72,500,000	ESIF	Greece
Large Infrastructure Operational Programme - TEN-T Airport	€ 42,568,374	ESIF	Romania
Interregional programme Réunion Conseil Régional 2014-2020	€ 40,800,000	ESIF	France
Operational Programme for EU Structural Funds Investments for 2014-2020 - TEN-T Airports	€ 40,546,803	ESIF	Lithuania
Operational Programme for Cohesion Policy Funding 2014-2020 - TEN-T Airport	€ 37,234,043	ESIF	Estonia
OP Infrastructure and Environment - TEN-T Airport	€ 36,896,782	ESIF	Poland
Tallinn Airport Upgrade	€ 30,000,000	EFSI	Estonia
	€ 868,546,002		

### 3.5 Urban transport projects

Table 7 Ten largest EU contributions to urban transport (1e)

Project	EU contribution	Fund	Country
OP Infrastructure and Environment - Clean urban transport infrastructure	€ 2,158,540,780	ESIF	Poland
Transport Infrastructure, Environment and Sustainable Development OP - Clean urban transport infrastructure	€ 1,118,890,585	ESIF	Greece
Regional Operational Programme - Clean urban transport infrastructure	€ 907,186,384	ESIF	Romania
Integrated Transport OP - Clean urban transport infrastructure	€ 625,274,112	ESIF	Hungary
Large Infrastructure Operational Programme - Clean urban transport infrastructure	€ 543,319,149	ESIF	Romania
Integrated Regional Operational Programme - Clean urban transport infrastructure	€ 448,904,902	ESIF	Czech Republic
OP Development of Eastern Poland - Clean urban transport infrastructure	€ 418,104,875	ESIF	Poland



Project	EU contribution	Fund	Country
ROP Sicilia ERDF - Clean urban transport infrastructure	€ 400,500,000	ESIF	Italy
Transport - Clean urban transport infrastructure	€ 392,648,369	ESIF	Czech Republic
Regional Operational Programme for Slaskie Voivodeship - Clean urban transport infrastructure	€ 358,607,765	ESIF	Poland
	€ 7,371,976,921		

### 3.6 EFSI projects

Table 8 Ten largest transport related EFSI projects (1f)

Project	EU contribution	Mode impacted	Country
D4/R7 Slovakia PPP	€ 427,000,000	Road	Slovakia
Trenitalia Regional Rolling Stock	€ 300,000,000	Rail	Italy
Greek Regional Airports PPP	€ 300,000,000	Aviation	Greece
A6 Wiesloch-Rauenberg to Weinsberg PPP	€ 299,000,000	Road	Germany
Grand Coutournement Ouest de Strasbourg (A355)	€ 280,000,000	Road	France
Autovie Venete A4 widening	€ 250,000,000	Road	Italy
Euromed RORO	€ 200,000,000	Shipping	Italy
CPH Airport Expansion TEN-T	€ 168,000,000	Aviation	Denmark
SMT Artois Gohelle - Projet BHNS Bulles	€ 110,000,000	Urban transport (bus)	France
Accessibility Ports Infrastructure	€ 105,000,000	Rail & road access to ports	Spain
	€ 2,439,000,000		

### 3.7 Transport-specific alternative energy projects

Table 9 Ten largest EU contributions to transport-specific alternative energy projects (2)

Project	EU contribution	Fund	Alternative energy type	Country
SMT Artois Gohelle - Projet BHNS Bulles	€ 110,000,000	EFSI	Hydrogen & hybrid	France
Knappenrode-Horka German Polish border: Upgrade, electrification and ETCS	€ 33,300,000	CEF	Electricity	Germany
Deployment of ETCS L2 onboard units on 59 FLIRT (EMUs) electric multiple units	€ 25,075,000	CEF	Electricity	Hungary



Project	EU contribution	Fund	Alternative energy type	Country
Sustainable LNG Operations for Ports and Shipping - Innovative Pilot Actions (GAINN4MOS)	€ 19,218,567	CEF	LNG	Spain, France, Italy, Portugal, Slovenia
Electrification of railway lines no.278 and 274, Wegliniec-Zgorzelec section	€ 19,086,542	CEF	Electricity	Poland
DOOR2LNG - Upgrade of the maritime link integrated in the multimodal container transport routes	€ 17,038,000	CEF	LNG	Finland, Germany, Netherlands, United Kingdom
Blue Baltics - LNG infrastructure facility deployment in the Baltic Sea region	€ 15,046,500	CEF	LNG	Lithuania, Sweden, Estonia, Germany
PAN-LNG Project	€ 14,435,797	CEF	LNG/LCNG	Hungary
RealLNG: Turning LNG as marine fuel into reality in the North Sea-Baltic region	€ 13,082,775	CEF	LNG	Germany, The Netherlands
Supply, electrical facilities and acoustic works on the HSRL section Chamartin-Atocha-Torrejon de Valesco	€ 11,447,416	CEF	Electricity	Spain
	€ 277,730,597			



## 4 Certainty of results

The certainty of the results depends on different factors:

The certainty of the results depends on the certainty of the data that has been used in the analysis. Regarding the EU support provided to transport infrastructure by the ESIF, an allocation of the ex-ante planned 2014-2020 support to the interventions fields (see table in Annex) has been used for the purpose of this study. This information was provided by each Managing authority to the EU during the preparation of the adopted programme documents. The values are thus ex-ante assessments by the programmes based on the themes and the actions they plan to finance with a view to contributing to the programme policy objectives. The actual allocation of the support to the intervention fields may deviate from the planned allocation.

The certainty of the results also depends on the certainty of the categorisation of the projects. For most facilities it holds that there have no predefined project categories for urban transport (exception: ESIF) and alternative fuels which is why the categorisation has, as far as possible, been carried out manually and thus depends on the assessment of the researcher.

The level of aggregation of the available data differs between the facilities. The ESIF data have the highest level and the CEF Transport data the lowest level of aggregation - this contributes to a high representation of ESIF projects in the project lists.



## 5 Annex

### 5.1 ESIF: Intervention field dimensions and codes

Table 10 ESIF intervention field dimensions considered in study

II. Infrastructure providing basic services and related investment		Considered
<b>Transport Infrastructure</b>		
24	Railways (TEN-T Core)	X
25	Railways (TEN-T comprehensive)	X
26	Other Railways	X
27	Mobile rail assets	X
28	TEN-T motorways and roads – core network (new build)	X
29	TEN-T motorways and roads – comprehensive network (new build)	X
30	Secondary road links to TEN-T road network and nodes (new build)	X
31	Other national and regional roads (new build)	X
32	Local access roads (new build)	X
33	TEN-T reconstructed or improved road	
34	Other reconstructed or improved road (motorway, national, regional or local)	
35	Multimodal transport (TEN-T)	X
36	Multimodal transport	X
37	Airports (TEN-T)	X
38	Other airports	X
39	Seaports (TEN-T)	X
40	Other seaports	X
41	Inland waterways and ports (TEN-T)	X
42	Inland waterways and ports (regional and local)	X
	Sustainable transport	X
43	Clean urban transport infrastructure and promotion (including equipment and rolling stock)	X
44	Intelligent transport systems (including the introduction of demand management, tolling systems, IT monitoring, control and information systems)	
	Information and communication technology (ICT) infrastructure	
45	ICT: Backbone/backhaul network	
46	ICT: High-speed broadband network (access/local loop; >/= 30 Mbps)	
47	ICT: Very high-speed broadband network (access/local loop; >/= 100 Mbps)	
48	ICT: Other types of ICT infrastructure/large-scale computer resources/equipment (including e-infrastructure, data centres and sensors; also where embedded in other infrastructure such as research facilities, environmental and social infrastructure)	

