

MIND THE GAP!

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Kindly hosted by MEP Dominique RIQUET



Why invest in transport?

Mobility is vital for the internal market and for the quality of people's lives. Transport enables economic growth and job creation.

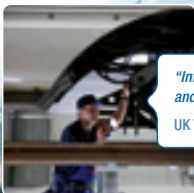
"Overall, transport infrastructure investments have a positive impact on economic growth, create wealth and jobs, and enhance trade, geographical accessibility and the mobility of people"

European Commission, White Paper: Roadmap to a Single European Transport Area, 28 March 2011



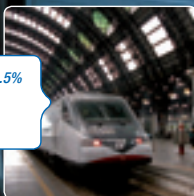
"Infrastructure networks form the backbone of a modern economy and are a major determinant of growth and productivity"

UK Treasury, National Infrastructure Plan 2011



"We watched investments in inland transport enter a trend of steady decline. In 1975, they stood at 1.5% of GDP. By 2008, they had fallen below 0.8% — a record low."

European Commission Vice-President Siim Kallas, responsible for transport, 30 September 2011



"[The European Parliament] approves the 10 goals for a competitive and resource-efficient transport system and the targets set in the White Paper for 2050 and 2030"

European Parliament, Own Initiative Report on the Roadmap to a Single European Transport Area, 24 November 2011



Why invest in rail transport?

Transport enables economic growth and job creation. Every day European railways transport about 22.2 million passengers and about 4 million tons of goods.

Transport is responsible for approximately one-quarter of all greenhouse gas output in the EU.

Transport is highly oil-dependent. 96% of passenger and freight kilometres are fuelled by oil.

This needs to change!

The 2011 Transport White Paper lays down very challenging targets to achieve a 60% reduction in GHG emissions on 1990 levels by 2050. Shifting investments towards sustainable modes such as rail and inland waterways will be crucial in achieving these goals and in reducing our dependence on imported oil.

What is needed?

- Significantly more than 1.5 trillion EUR will be needed from 2010-2030 to create a well-performing transport network in Europe.
- Investment in the current financing period has been focused on road projects. Under-financing of rail infrastructure has been a problem especially in Central and Eastern Europe with dramatic consequences for the performance and quality of rail services.

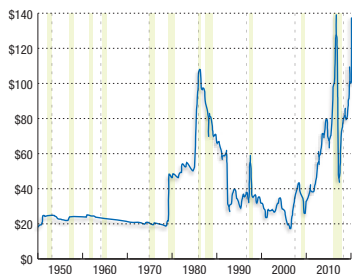
What should be done?

- Ensure an adequate budget for transport at EU level!
- Focus funding on sustainable modes of transport!
- Ensure adequate and reliable member state funding, for example through multi-annual contracts!
- Create a level-playing field by fully internalising external costs and by aligning infrastructure charges for road and rail!

Why change the way we move?

Transport is very highly oil-dependent: it is the fuel for around 96% of passenger and freight kilometres. This dependency makes it very vulnerable to fluctuations in the price of oil and to fuel security, as well as making it a major source of oil-based pollution.

Price of oil per barrel in US Dollar between 1945 and 2010; green areas mark US recessions



Source: Bloomberg, 30 September 2011

Through its use of electricity, that accounts for 80% of its traffic, rail is the only major mode of transport that can draw on a significant amount of the energy it needs from non-oil based sources.



"[The European Parliament] notes the Union's high degree of dependence on imported fossil fuels, whose supply from outside the Union entails significant risks in terms of the Union's economic security and in terms of the flexibility of its external policy options"

European Parliament, Own Initiative Report on the Roadmap to a Single European Transport Area, 24 November 2011

What is the impact of transport on the climate?

Travelling by rail is on average up to 10 times less CO₂ intensive compared to road or air transport in operational terms.

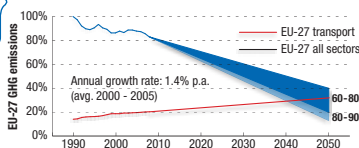
Transport is responsible for approximately one-quarter of all greenhouse gas output in the EU-27. Under targets laid down in the 2011 Transport White Paper, the sector now faces the extremely tough challenge of achieving a 60% reduction in GHG emissions on 1990 levels by 2050.

If current growth rates in transport were to continue, by 2050, CO₂ emissions from the sector would exceed the entire GHG emissions allocation for the whole of the EU.

The rail sector's biggest contribution towards reducing GHG emissions from transport can come from carrying more passengers and freight in preference to other more GHG-intensive modes. Even when taking into account the GHG emissions generated during construction of new lines, the overall impact of rail is still very favourable.

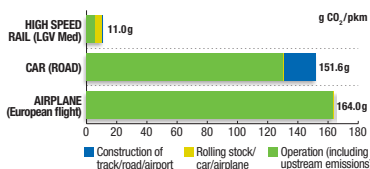
EU27 emissions reduction trajectory v. transport emissions growth, 1990-2050

(Based on EEA data, 2010)



An analysis of the CO₂ impact of the 200km Valence-Marseille route in southern France concluded that, in spite of the emissions generated during construction of the infrastructure for the new high speed line, the annual carbon footprint of high speed rail including operation, track construction and rolling stock construction was around 14 to 16 times less than transport by private car or aeroplane.

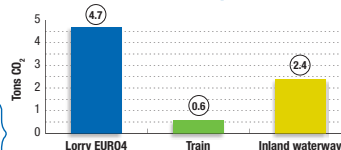
Carbon footprint of traffic modes on the Valence - Marseille route in France



Source: Carbon Footprint of High Speed Rail, SYSTRA 2011

Even for journeys on existing infrastructure, the CO₂ benefits of travelling by train are clear.

Carbon dioxide (100 tons cargo, Basel - Rotterdam, 700 km)



Source: www.ecotransit.org 2008

The Commission recognised the climate benefits of modal shift to rail by setting ambitious targets in the 2011 Transport White Paper: "30% of road freight over 300 km should shift to other modes such as rail or waterborne transport by 2030, and more than 50% by 2050 (...) this goal will also require appropriate infrastructure to be developed." "Triple the length of the existing high-speed rail network by 2030 and maintain a dense railway network in all member states. By 2050 the majority of medium-distance passenger transport should go by rail."

European Commission, White Paper: Roadmap to a Single European Transport Area, 28 March 2011

How much money is needed for transport infrastructure?

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1.5 trillion EUR

In order to create a well-performing transport network in Europe, the 2011 Transport White Paper identifies a financing need of 1.5 trillion EUR from 2010 to 2030 for all transport networks of all EU member states.

500 billion EUR

The Commission proposal on the regulation for the TEN-T Guidelines, published in October 2011, estimates that out of the 1.5 trillion EUR, 500 billion EUR will be needed to complete the TEN-T network by 2020.

250 billion EUR

From this, 250 billion EUR are required for the construction of missing links and the removal of bottlenecks in the core network.

About 105 billion EUR invested in inland transport infrastructure in Europe annually:

EU15: GDP in 2009 = 10,914bn EUR > 87bn EUR for inland transport (0.8%)

EU12: GDP in 2009 = 873bn EUR > 18bn EUR for inland transport (2%)
> EU27: 105bn EUR in 2009

Projecting the 105 billion EUR annually over the period 2010-2030, and assuming that national investment patterns remain unchanged, this would represent at least 2.1 trillion EUR, more than the needs estimated in the Transport White Paper of 1.5 trillion EUR. However, considering that spending patterns over the past decades have been far from satisfactory, as seen by the high number of speed restrictions, growing maintenance backlogs, and accumulating long terms debts, the 1.5 trillion EUR

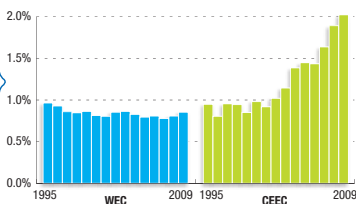
Is this realistic?

As can be seen in the chart below, in 2009 approximately 105 billion EUR was invested in transport infrastructure in Europe.

The data covers total gross investment (defined as new construction, extensions, reconstruction, renewal and major repair) in road, rail, inland waterways, maritime ports and airports, including all sources of financing.

It also covers maintenance expenditures financed by public administrations.

Investment in Inland Transport Infrastructure as % of GDP from 1995-2009



WEC: BE, DK, FI, FR, DE, IS, IE, ES, SE, UK
CEEC: HR, CZ, EE, MK, HU, LV, LT, ME, PL, RO, SI, SK, Albania, Serbia

Source: International Transport Forum 2011

In order to modernize the current transport network through increased interoperability and the introduction of intelligent transport systems, more and not less financial resources will be needed.

How much are member states investing?

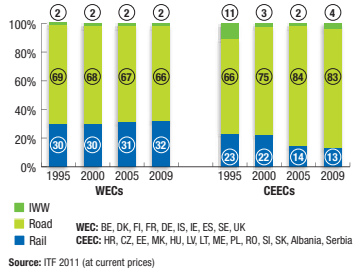
The percentage of GDP invested by member states in inland transport infrastructure in Western Europe has been steadily decreasing from 1.5% in 1975 to 0.8% in 2009, but increasing in CEEC from 0.9% in 1995 to 2% in 2009. Although the total amount of investment in infrastructure in CEEC has risen in the last few years, the modal distribution strongly favours the road sector.

In Western Europe, the development of transport infrastructure is trailing behind the growth of the economy.

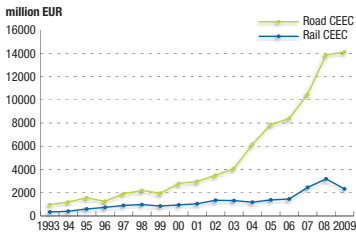
Where large investments have been made in the past, this spending pattern might be sufficient. For the rail sector, which in post-war Western Europe has seen decreasing levels of investment compared to competing modes, investment in rail infrastructure clearly has not been sufficient.

The situation is even more dramatic in Central and Eastern Europe. While CEEC countries are increasing their spending on transport infrastructure, the rail sector is receiving increasingly less compared to other modes. In 1995, rail received 23% of total investment in transport infrastructure compared to only 13% in 2009.

Distribution of infrastructure investment between modes



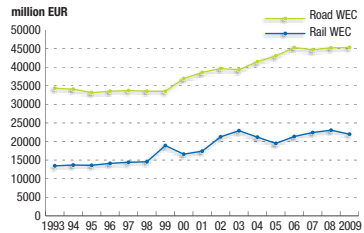
CEEC* Investment in rail infrastructure



* HZ, CZ, EE, HU, LA, LT, PL, RO, SK

Sources: ITF 2011

Western Europe* Investment in rail infrastructure



* AT, DK, FI, FR, DE, IR, NO, PT, ES, UK

What are the consequences of under-investment in rail?

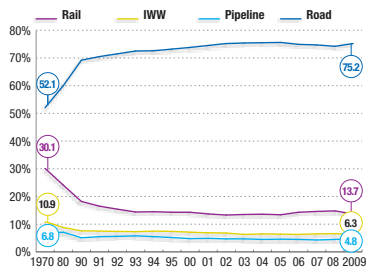
The under-financing of rail infrastructure over the past few decades, especially in Central and Eastern Europe, has become one of the main problems in Europe's transport policy today. This has had dramatic consequences on the performance and quality of rail services.

The economic crisis and resulting national budget deficits have exacerbated this situation in recent years. Poorly maintained infrastructure and deferred renewals and/or upgrades lead to speed restrictions and delays, and ultimately to poor quality and punctuality for the customer.

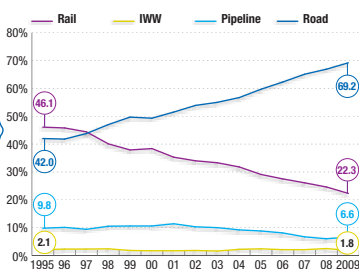
In the long term, a growing maintenance backlog and deferred investments have serious cost and planning implications for the management of the rail infrastructure. It creates uncertainty and leads to the closure of lines. A loss of competitiveness with respect to other modes is inevitable.

Inland transport freight modal share in Europe: rail freight decline as a result of imbalanced investments

Western Europe freight modal share



CEEC freight modal share



Due to lack of financing, the Polish rail infrastructure network, for example, has been running deficits in maintaining their network for many years.

As a result, in 2010, there were over 5,000 speed restrictions on the Polish rail network. On average, this is equivalent to encountering a speed restriction on every four kilometers of the network. Additionally, over 7% of tracks had to be closed.

How much does the EU spend on transport?

The EU intends to spend a total of about EUR 90bn on transport infrastructure under the current financial perspective 2007-2013. EUR 41.3bn, that is the majority of this funding, is spent on road projects. EUR 28.4bn, an insufficient share, is spent on rail.

EU funding for transport comes from two different sources:

- the TEN-T budget worth EUR 8bn and
- EUR 82bn from the cohesion policy budget.

Out of the EUR 82bn, EUR 43bn will be invested in TEN-T projects, the rest in secondary infrastructure.

The EU provides co-funding, so a large part of the project costs is covered by member states. For TEN-T projects, member states will invest EUR 196bn in the current financial period.

A large part of TEN-T funds is invested in rail (EUR 4.8bn) and inland waterways and maritime transport (EUR 0.7bn), i.e. in sustainable modes of transport. By far the largest part of the 2007-2013 money for transport infrastructure - more than 10 times as much as TEN-T - is provided by the cohesion policy budget. Out of the EUR 82bn allocated to transport from the ERDF and Cohesion Fund, about EUR 41bn will be spent on road infrastructure. A total of EUR 23.6bn will be spent on rail infrastructure.

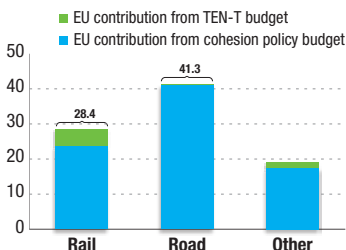
EU

and Member States' funding for transport infrastructure in bn EUR.

	EU-FUNDING		MEMBER STATE FUNDING
	TEN-T	ERDF AND COHESION FUND	
TEN-T INFRASTRUCTURE	8	43	196
SECONDARY TRANSPORT INFRASTRUCTURE	not applicable	39	not available
TOTAL	8	82	not available

Total

EU contribution from TEN-T and cohesion policy budget by transport mode (bn EUR).



What will happen in the future? More money for sustainable transport?

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EUR 21.7bn

For the period 2014-2020 the Commission is proposing the introduction of a new instrument, the Connecting Europe Facility (CEF) with a transport budget of EUR 21.7bn.

EUR 10bn

An additional EUR 10bn are to be ring-fenced in the Cohesion Fund for transport infrastructure under the CEF.

EUR 24.4bn

This will be complemented through the normal Cohesion Fund, under which about EUR 24.4bn should be available for transport in more general terms.

The EU only co-finances projects. This means that a large part of costs has to be covered by the member states.

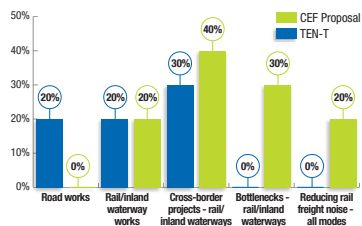
Actual levels of investment in transport will therefore depend heavily on the commitment and ability of member states to co-finance infrastructure. This risks being affected by the ongoing financial crisis.

The EU applies different co-financing rates according to the type of project.

The Commission proposal for the new Connecting Europe Facility sees an important shift in these rates towards supporting more sustainable modes of transport.

The new co-financing rates may additionally be increased by up to 10% for actions having cross-sector synergies, reaching climate mitigation objectives, enhancing climate resilience or reducing greenhouse gas emissions.

Co-financing rates under current TEN-T and as proposed in the new CEF



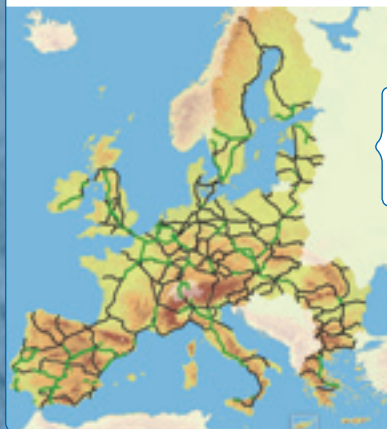
The Future TEN-T Network – focusing resources on key infrastructure

The TEN-T Guidelines define where transport investments should be made. The new Guidelines proposed by the European Commission in October 2011 call for a dual layer approach, consisting of a core network and a comprehensive network.

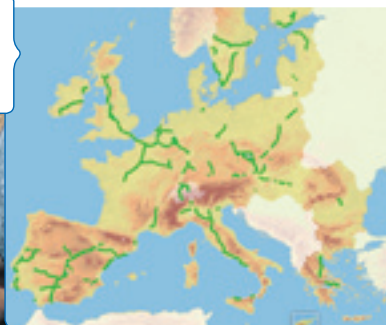
The core network reflects the strategically most important parts of the TEN-T network. This approach will enable focusing scarce financial resources on projects of high European added value, such as the removal of bottlenecks and the construction of missing links.

- fragmented 'patchwork' instead of network
- many technical barriers for rail infrastructure
- poor connections between member states
- insufficient inter-modality

Proposed TEN-T Core Network by 2030



TEN-T priority projects completed in 2011



- reflects the strategically most important parts of the TEN-T network
- includes 10 multimodal corridors
- connects 85 important economic centers and airports, 138 sea and inland ports, 28 cross-border points

Characteristics of the future TEN-T Network

	TODAY	2017	2020
LENGTH OF CONVENTIONAL RAILWAY TEN-T NETWORK (IN KM)	81,230	74,071	71,490
LENGTH OF HIGH-SPEED RAILWAY TEN-T NETWORK (IN KM)	10,733	20,022	23,198
NUMBER OF PORTS CONNECTED TO RAILWAY NETWORK (OUT OF A TOTAL OF 82 PORTS)	27	41	54
NUMBER OF AIRPORTS CONNECTED TO RAILWAY NETWORK (OUT OF A TOTAL OF 37 AIRPORTS)	12	18	24

Source: European Commission proposal on Connecting Europe Facility, 2011

What else can be done? Make the polluter pay!

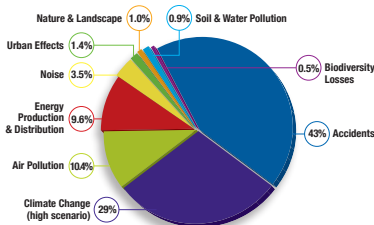
Price signals play a crucial role in influencing traffic and travel behaviour in the transport system. Fully applying charges for external costs – the indirect effects of transport, such as noise, air pollution and congestion that the transport user causes but does not pay for – can generate revenues and ensure financing for new transport infrastructure.

The 2011 Transport White Paper stated that transport charges and taxes must be restructured in the direction of wider application of the 'polluter-pays' and 'user-pays' principles.

Recent developments include the 2011 revision of the so-called 'Eurovignette Directive', which represented a first step towards a higher degree of internalisation of costs generated by heavy goods vehicles.

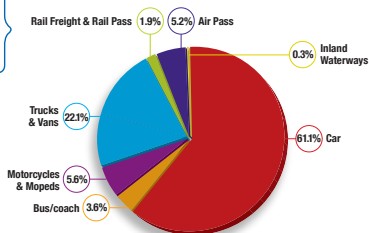
The total external costs for transport for 2008 were estimated at EUR 510bn without congestion and between EUR 660bn and EUR 760bn if congestion is taken into account.

Relevance of the cost categories for all modes



SHARE OF THE DIFFERENT COST CATEGORIES ON TOTAL EXTERNAL COSTS 2008 FOR EU-27 (EXCLUDING CONGESTION)
Data include the EU-27 with the exemption of Malta and Cyprus, but including Norway and Switzerland. Data do not include congestion costs.
Source: External Costs of Transport in Europe, CE Delft 2011.

Total external costs 2008 per mode without congestion



Source: External Costs of Transport in Europe, CE Delft 2011. Figures are for EU27 minus Cyprus and Malta but including Norway and Switzerland

Make the polluter pay!

Example: Gotthard Base Tunnel

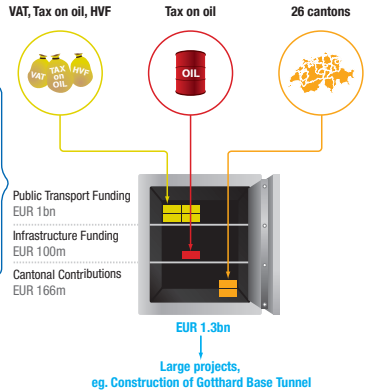
The 57km-long Gotthard Base Tunnel is a new railway tunnel beneath the Swiss Alps due to open in 2016/2017. The construction of the tunnel is funded by the Swiss public transport fund that is fed mainly by the kilometre-based heavy vehicle fee, payable by all trucks over 3.5 tonnes using Swiss roads.

Calculated on the basis of total weight, emission level and kilometres driven, the aim of the kilometre-based heavy vehicle fee (HVF) is to internalise the external costs of trucks, therefore applying the polluter-pays principle, and to encourage more freight onto rail. Its introduction followed a series of referendums in which the Swiss people made clear their desire for a shift of freight transport from road to rail. The HVF also helped fund the 35km-long Lötschberg Tunnel, which opened in 2007.

In 2010, railway projects in Switzerland received nearly EUR 1.06bn funding out of HVF revenues. This is almost as much as the total income of Swiss rail infrastructure from the track access charges of freight operators.

The financing of rail infrastructure has been one of the key factors behind the success of Swiss rail: more people use the train in Switzerland than in any other country in the world. With over one million passengers per day, 2010 saw a rise of 6% (compared to 2009). In the freight business, output increased in 2010 by 12.3% (compared to 2009), with 200 000 tons of goods being transported each day. In 2011, passenger transport increased by another 2.7%, while freight traffic decreased by 5.8% (compared to 2010).

Financing of SBB rail infrastructure (2010)



© AlpTransit Gotthard Ltd.
Source: SBB 2010 (Extract)

Towards a level playing field? Example: Slovakia

A formal alignment or linkage between road and rail infrastructure charging for freight would be a major step forward in achieving a level playing field for intermodal competition.

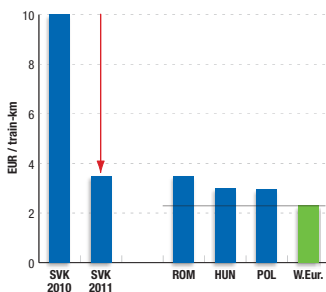
In January 2011 the Slovak government raised state funding for rail infrastructure, thus enabling a reduction of the average track access charge for freight trains **from 10 EUR / train-km to 3.50 EUR / train-km**.

This brings Slovakia closer to average European levels for 2011.

Slovakia has also reformed road infrastructure charging, with kilometre-based charging now being applied to a substantial share of the motorway network.

As a result, the total infrastructure charges for comparable road and rail freight shipments are now at similar levels.

Rail infrastructure charging in Slovakia



Source: CER members (2010 values).

Data in EUR per train-km for a typical run of a 960 gross tonne freight train. Western Europe: average of Germany, Austria, France, Italy, Belgium, Denmark and Finland.

Ensure reliable financing!

Multi-annual contracts

Multi-annual contracts between governments and infrastructure managers improve the predictability, the efficiency and the transparency of the use of funds for the construction, maintenance and renewal of infrastructure.

In this type of contract, governments commit to pay a certain sum to the infrastructure manager each year for investments in infrastructure, in return for which the infrastructure manager commits to a series of quality and efficiency obligations.

- Multi-annual contracts force both parties to take a long-term view and to develop maintenance plans on the basis of future demand and the infrastructure manager's business plan.
- Through the reliable annual money transfer from the government the infrastructure manager wins the necessary scope as an entrepreneur. Multi-annual contracts are a tool for better cost control and reduced unit costs, since long-term planning allows for better adaptation of equipment and staff and the drawbacks of annual budgets can be avoided.

- Less bureaucracy:
 - Replacement of a multitude of individual service agreements through one single contract
 - Simplification of the construction licenses through one single contract
- The infrastructure manager commits himself to operate and maintain the rail infrastructure in a fully usable way as defined in the contract. This will be assessed on the basis of quality indicators and is monitored in regular reports. Multi-annual contracts thus facilitate a shift from compensation for expenditures to performance-related payments.

Examples of EU co-financed projects

High-speed rail - France

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Project

Construction of phase 1 of the Rhine-Rhône high speed branch:

- 140km of new high speed railway line between Villers-Les-Pots (near Dijon) and Petit-Croix (near Belfort)
- 13 viaducts – one of which will span 1,340 m
- 160 bridges
- A 2 km tunnel
- Two new railway stations – Besançon Franche Comté TGV and Belfort-Montbéliard TGV

Period

January 2007 – December 2011

Financing

Total costs: EUR 2.1 billion

EU support (TEN-T): EUR 198 million (9% of project costs)

Goals

- Faster connections between economic and urban centres along the Rhine and Rhône, such as Rotterdam, Frankfurt and Lyon and including Switzerland
- Significantly shorter travel times for passengers:
 - Dijon-Strasbourg: 2 hours – today 3h40min
 - Dijon-Mulhouse: 1h05min – today 2h35min
 - Dijon-Zurich: 2h25min – today over 4 hours
- 12 million passengers per year expected
- Significant CO₂ emissions reduction

Examples of EU co-financed projects

Line modernisation - Czech Republic

Project

Modernisation of the line Votice – Benešov u Prahy

- Key part of the line “České Budějovice – Praha” (project for the modernization of National Transit Railway Corridor IV)
- Tracks doubled
- 5 new tunnels

Goals

- Increase in passenger numbers by approximately 35%
- Faster connections between Prague and the Southern part of the Czech Republic
- Faster connections between Prague and Southern Bohemia, and towards Linz (Austria)
- Increased line capacity (The number of long-distance passenger trains will increase from 20 to 58 per day)
- Significant CO₂ emissions reduction

Period

August 2009 – May 2013

Financing

Total costs: EUR 231 million

EU co-funding (Cohesion Fund): EUR 162 million (70% of eligible costs)

Examples of EU co-financed projects

Line electrification - Germany

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Project

Electrification of the Line Reichenbach-Hof

Period

July 2010 – December 2013

Goals

- By-pass for Rail Freight Corridor 3 (ERTMS Corridor B) Stockholm-Naples, which is reaching capacity limits
- Increased traffic demand for passengers and rail freight
- Reduction of travel time by 20 min
- Increase in transport capacity by 30%
- Higher punctuality on the corridor between Dresden and Nürnberg
- Significant CO₂ emissions reduction

Financing

Total costs: EUR 143 million

EU co-funding (ERDF): EUR 49 million
(34% of eligible costs)

Project would not have been built without EU financing



Examples of EU co-financed projects

New high speed railway line between Bologna and Florence - Italy

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Project

Construction of high speed line between Bologna and Florence:

- 300 Km/h maximum speed
- 78,5 km of new lines
- 73,8 km of tunnels (9 tunnels)
- 6 viaducts
- 19,8 km of tunnels service

Period

July 1996 – June 2009

Financing

Total costs: EUR 5,970 billion
EU support (TEN-T): EUR 136,1 million
(2,3% of project costs)

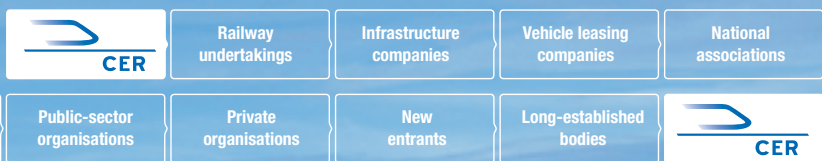
Goals

- Significantly shorter travel times for passengers: nowadays 35min (before 59min)
- Considerable increase in the capacity of the traffic
- Around 21 and 25 million passengers per year expected
- Significant CO₂ emissions reduction

About CER

The Community of European Railway and Infrastructure Companies (CER) is the leading European railway organisation. Based in Brussels, it was founded in 1988 with 12 members and now brings together more than 70 European companies.

The CER membership is versatile



CER members represent in EU, EFTA and EU accession countries:

75%



of the rail network length

>85%



of the rail freight business

>90%



of rail passenger operations

1.2 million

jobs are directly created by CER members

CER promotes a strong rail industry that can form the basis of a long-term sustainable European transport system. For more information, see www.cer.be