





# TEN – T Trans-European Transport Network

Implementation of the Priority Projects
Progress Report

Information contained in this report summarises the current state of play regarding the development of the priority projects, including the sources of financing. It was put together with the data provided by the Member States in the framework of the annual survey on the implementation of priority project and complemented with information provided in response to the request of Vice President Barrot sent in preparation of the informal Council in Brdo. Each Member State provided information for the sections of the priority projects located on its territory, whereas the cross border sections were reported on jointly by the countries involved. In addition, the European Investment Bank provided information on the loans given to priority projects and the Commission added the figures reflecting the grant allocation to individual sections. This information was subsequently revised and in some cases altered by the Member States. Despite the attention given to the quality and reliability of data, some figures, especially on the sources of financing, may be missing. It should also be borne in mind that the data for the programming period 2007-2013 and beyond reflects intentions and plans of the Member States. In particular estimates of investment on TEN-T priority projects from cohesion policy funds are at this stage indicative. Information received may therefore naturally evolve in the future. The completeness of the information gathered in the table will be gradually improved since the process of data improvement based on further cooperation with Member States Authorities will continue.

The report includes statistical information on 28 TEN-T priority projects only. PP15 (Galileo) and PP21 (Motorways of the sea) have been excluded from the scope of this enquiry. The priority projects listed in the financing tables are divided into sections in line with the definition in annex III of the TEN-T Guidelines. In case of some priority axes Member States provided additional information on sections of the axis that are not priority ones in the sense of annex III of the TEN-T Guidelines. These figures are not included in the total amounts illustrating the development of each priority axis. To the extent possible, the information on total costs and the remaining investment needs is in 2007 prices.

All data provided in this brochure are as of 27/05/2008.

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### Introduction

This progress report pulls together different data and information in an attempt to summarise as accurately as possible the current state of play regarding the implementation and development of the TEN-T priority projects. It draws on the knowledge of the European Commission and on the work and reports from the European Coordinators. It also brings together data provided by Member States' Administrations in the framework of the annual survey on the implementation of priority projects as complemented with information provided in response to the request of Vice President Barrot sent in preparation of the informal Council in Brdo (6 May 2008). The European Investment Bank also provided up to date information on loans given to priority projects. All information contained herein was submitted to Member States and reviewed at a meeting of the TEN-T Guidelines Committee held on 24 April 2008. The report should nevertheless be considered as work in progress where the quality of the data and the methodologies applied to collect and process the data can and should be improved further.

This report is meant to provide the basis and starting point for a process of regular and comprehensive reporting at the highest level on the technical and financial status of each of the TEN-T priority projects. Such reporting should create transparency, allow for the exchange of best practices, foster coordination between all parties involved and facilitate the mobilisation of the necessary resources, both financial and technical, to complete these key projects. It is expected that the reporting process that is triggered by this report will support Transport Ministers in their efforts to ensure that the investments are completed and that any technical and political obstacles are overcome.

The report provides an overview of the updated costs of the priority projects, now set at € 397 billion which constitutes an increase of 16,8 % as compared to the costs in 2004 ( € 340 billion). This increase reflects in part some delays and cost overruns but is also largely explained by the natural process of project preparation where more accurate investment costs emerge when studies and technical preparations come to fruition. The report gives a positive image on progress achieved, with 3 PPs completed - the Øresund fixed link (connecting Sweden and Denmark, completed in 2000), the Malpensa airport (Italy, completed in 2001) and the Cork-Dublin-Belfast-Stranraer railway line (Ireland-UK completed in 2001), and one virtually completed - the Betuwe railway line (no detailed reports for these 4 PPs), as well as two more nearing completion: - the PBKAL high speed rail, and the West Coast main line. At the same time, important sections of other priority projects have also been completed during the past years. These include: the section Nürnberg-Ingolstadt, part of PP1, was put into service in 2006; the first phase of the TGV East in France, part of PP4 and 17, was put into service in 2007; and the Madrid-Barcelona high-speed rail link was completed in March 2008. Many more are about to follow, such as for instance the Milano-Bologna-Firenze high-speed line which should be ready in 2009. The amount invested until 2007 represents nearly one third of the total investment required to complete the Priority Projects.

Not only does this report paint a positive picture of the progress already achieved on the priority projects - nearly one third of the necessary investments have already been made - but it confirms the commitment of Member States and Community Institutions to accelerate the delivery of these key projects. Their completion will not only improve the economic efficiency of the European transport system - they will also provide direct benefits for European citizens. These priority projects, which include a high proportion of rail and inland waterway schemes, should also contribute to the emergence of a more sustainable transport system and help us fight against climate change.

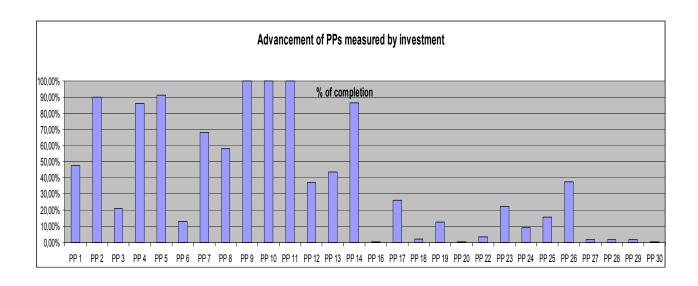
This remarkable progress can be explained in part by the efforts of the European Commission in the recent multi-annual programming exercise for the period 2007-2013. The Commission concentrates funding on a limited number of projects, where the European added value is based on the leverage effect of the funding provided and on the acceleration of the project. The Commission proposal to fund the Brenner tunnel and its access routes to the tune of over € 900 million, the Lyon-Turin base tunnel for € 672 million, the Fehmarn Belt for € 351 million, the Seine Escaut inland waterway project for € 420 million, or the Rail Baltica for € 125 million to name a few examples, has been approved both by the European Parliament and the Council. This funding decision will mobilise very significant amounts of national funding. Equally the programming of Community structural funds, with up to € 15 billion earmarked for the priority projects, signals the determination of the European institutions to accelerate the implementation of these projects. Finally, the European Investment Bank's ever increasing portfolio of TEN-T projects is a further sign of commitment at European level.

At European level, the Commission will step up its efforts to encourage Member States to coordinate their infrastructure policies, with a view to exchanging best practices and identifying early obstacles to funding and solving cross border constraints. It will continue to rely on the work of the European coordinators who, by their dedication, have played a major role in advancing the priority projects.

Public funds also need to be complemented by greater private sector involvement. The Commission will strive to make available the expertise and the instruments required to promote a wider use of private funding. I have started to develop two key levers in this regard. Firstly, new financial instruments such as the Loan Guarantee instrument for TEN Transport projects have been put in operation in 2008 by the EIB and the European Commission in order to facilitate access to loans by PPP project promoters. Secondly, the contribution user charging could make to the financing of infrastructure investments, notably in the framework of better internalisation of external costs will also be explored.

It is important that this momentum is maintained throughout the 2007-2013 programming period. If all the intentions highlighted in this first report are confirmed, by the end of the period we will have delivered a further thirty eight per cent of the investment required, taking us yet closer to our goal of a sustainable and competitive transport network fit for the 21<sup>st</sup> Century.

The report also indicates that the efforts will need to be sustained and even further increased for several PPs after 2013, as the completion dates for some of the major projects have fallen behind the original timetables. It is very clear today that significant parts of the 30 priority projects will not be completed until 2015 or even 2020. It will be difficult to meet the 2020 deadline for some of the most complex projects, such as the Alpine crossings, along with a number of other bottlenecks on the priority projects. According to the data collected nearly one third of the investment will still be required (30,28%) after 2013.



# Implementation of the TEN-T Priority Projects\* Updated overview of costs and investment

Priority axis	MSs involved	End of works confirmed by MS	Total cost in M EUR	Total investment before 2007 in M EUR	Total 2007- 2013 in M EUR	Remaining investment in M EUR
PP1 Railway axis Berlin-Verona/Milan- Bologna-Napels-Messina-Palermo	AT, IT, DE	2024	47.054,61	22.370,53	14.285,63	10.398,45
PP2 High-speed railway axis Paris- Brussels/Brussels-Cologne- Amsterdam-London	BE, DE, NL, UK	2015	18.848,01	16.954,61	1.857,07	36,33
PP3 High-speed railway axis of south- west Europe	ES, FR, PT	2020	50.656,68	10.556,20	26.782,65	13.317,83
PP4 High-speed railway axis east	FR, DE	2013	5.255,00	4.521,60	590,60	142,80
PP5 Betuwe Line	NL	2008	4.776,40	4.361,00	415,40	0,00
PP6 Railway axis Lyon-Trieste- Divaca/Koper/Divaca-Ljubljana- Budapest-Ukrainian border	FR, HU, IT, SL	2025	60.741,96	7.827,03	10.427,94	42.486,98
PP7 Motorway axis Igoumenitsa/Patra- Athina-Sofia-Budapest	BG, GR, RO	2020	14.928,70	10.051,10	4.727,60	150,00
PP8 Multimodal axis Portugal/Spain- rest of Europe	ES, PT	2017	15.324,54	8.882,71	4.752,97	1.688,86
PP9 Railway axis Cork-Dublin-Belfast- Stranraer (COMPLETED)	IRL, UK	2001	357,00	357,00	0,00	0,00
PP10 Malpensa Airport (Milan) (COMPLETED)	IT	2001	1.344,00	1.344,00	0,00	0,00
PP11 Öresund fixed link (COMPLETED)	DK, S	2001	4.158,00	4.158,00	0,00	0,00
PP12 Nordic triangle railway-road axis	FIN, S	2016	11.746,37	4.364,40	5.705,37	1.676,60
PP13 UK-Ireland/Benelux road axis	IRL, UK	2015	7.526,44	3.285,65	4.057,80	182,99
PP14 West Coast Main Line	UK	2009	12.629,24	10.896,37	1.732,87	0,00
PP16 Freight railway axis Sines/Algeciras-Madrid-Paris	ES, PT	2020	8.899,04	48,80	1.100,34	7.749,90
PP17 Railway axis Paris-Strasbourg- Stuttgart-Vienna-Bratislava	AT, FR, DE, SK	2020	13.563,29	3.528,68	6.779,99	3.254,62
PP18 Rhine/Meuse-Main-Danube inland waterway axis	AT, BE, BG, DE, HU, NL, RO	2016	2.103,28	45,29	1.075,55	982,44
PP19 High-speed rail interoperability on the Iberian peninsula	ES, PT	2020	41.770,45	5.236,30	33.194,37	3.339,78
PP20 Fehmarn Belt railway axis	DE, DK	2018	7.930,70	36,72	2.680,50	5.213,48
PP22 Railway axis Athina-Sofia- Budapest-Vienna-Prague- Nürnberg/Dresden	AT, BG, CZ, DE, GR, HU, RO	2020	12.641,80	465,36	5.618,52	6.557,92
PP23 Railway axis Gdansk-Warsaw- Brno/Bratislava-Vienna	CZ, PL, SK	2017	6.159,17	1.384,42	3.296,22	1.478,53
PP24 Railway axis Lyon/Genoa-Basel- Duisburg-Rotterdam/Antwerp	BE, DE, FR, IT, NL	2020	22.647,29	2.103,69	5.421,19	15.122,41
PP25 Motorway axis Gdansk- Brno/Bratislava-Vienna	AT, CZ, PL, SK	2017	6.845,96	1.063,50	5.782,46	0,00
PP26 Railway-road axis Ireland/United Kingdom/continental Europe	IRL, UK	2020	6.242,82	2.356,39	2.473,43	1.413,01
PP27 Rail Baltica axis Warsaw- Kaunas-Riga-Tallinn-Helsinki	EE, LT, LV, PL	2020	3.198,19	50,00	1.556,19	1.592,00
PP28 Eurocaprail on the Brussels- Luxembourg-Strasbourg railway axis	BE, LUX	2013	1.183,19	18,76	1.083,23	81,20
PP29 Railway axis if the Ionian/Adriatic intermodal corridor	GR	2019	4.308,00	81,00	1.074,00	3.153,00
PP30 Inland waterway Seine-Scheldt	BE, FR	2016	4.422,41	21,31	4.097,70	303,40
Total			397.262,54	126.370,42	150.569,57	120.322,55

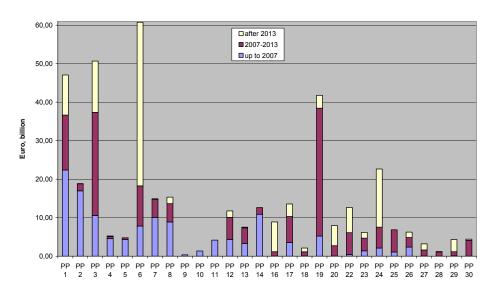
<sup>\*</sup>This table is based on information received in April 2008 from Member States in preparation of the Informal Meeting of Transport Ministers in May 2008. PP15 Galileo and PP 21 Motorways of the Sea are not included. Costs and investment for the priority sections of the PP only. A full table with detailed information for all the priority sections is also available.

# Breakdown of investment in PPs in time

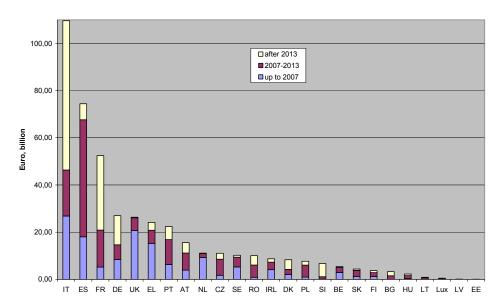
Overall investment

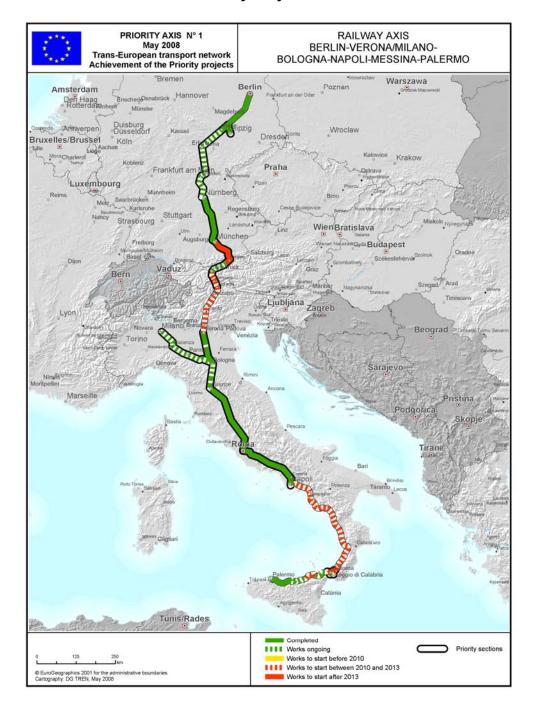


# Investment by PP



### **Investment by Member State**





ſ				Inve	stment bef	ore 2007 in M	EUR		Inve	stment 20	07-2013 in M E	UR			
ı		Estimated	Total			Of which		Degree of			Of which		Degree of		Investment
	MS involved	completion date	cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	after 2013 as % of total investment
l															

Length of	Total		Works ongoing	Works completed	Works to be started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
uie FF III KIII	2520	in km	756	956	808		0	682	126
		in %	30,0%	37,9%	32,1%		0,0%	27,1%	5,0%

Completed: 956 km

### Railway axis Berlin-Verona/Milano-Bologna-Napoli-Messina-Palermo

The railway axis 'Berlin-Verona/Milano-Bologna-Napoli-Messina-Palermo' is a key north-south axis crossing the Alps along the Brenner Corridor. It touches upon three Member States: Germany, Austria and Italy. It will link up important urban areas in Germany and in Italy. A significant increase in capacity will result and the project will bring about modal shift in the sensitive mountainous regions it is crossing. The progress along this railway axis is good. Regular reporting has been made available to the European Parliament, the Council and the wider public through the annual activity reports of the European Coordinator, Mr. Karel Van Miert.

### Cross-border sections

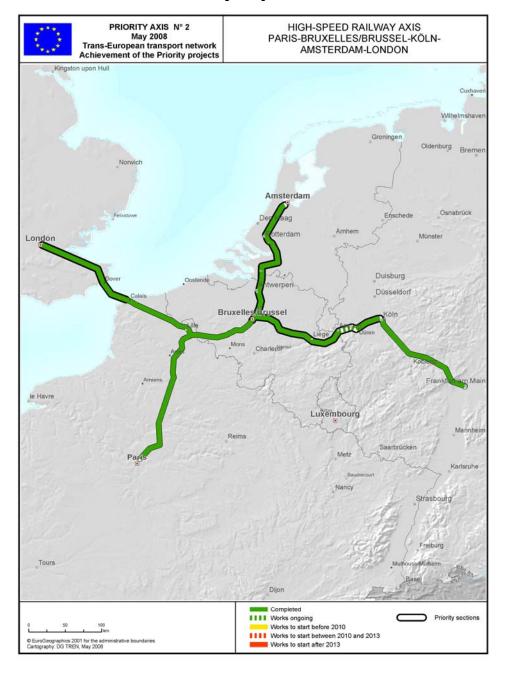
The München-Innsbruck-Bolzano-Triente-Verona section constitutes the core section of this priority project. It comprises the cross-border Brenner Base Tunnel (BBT) and the northern and southern access routes. Work on this central section is progressing. This has been underlined by the repeated expression of support by all three Member States involved. Under the 2007-2013 TEN-T Multi-annual programme (MAP), investment of € 903 million is anticipated for the Brenner Base Tunnel and both access routes.

The works on the BBT are due to start in 2010 and to complete in 2022. The northern and southern access routes are progressing as well. The section between Wörgl and Innsbruck is under construction and will be finalised in 2012. For the other sections on the access routes, studies and/or works will be carried out during the present financial programming period. Special attention will be paid to the section between Fortezza and Ponte Gardena, which has the same technical characteristics as the actual Brenner Pass and therefore needs to be eliminated at the same time.

However, several important issues are still outstanding. The environmental impact procedure (EIA) still needs to be completed for the BBT and its financial model, including the possibility of a PPP and guarantees from the Member States involved, needs to be finalized this year. Equally on the access routes, their realization is still some way ahead, especially for the northern access between Munich and Kundl/Radfeld.

### Other sections

The sections outside this core central section are also being actively pursued. Germany has put into service the sections between Berlin and Halle/Leipzig, as well as between Nürnberg and Munich. Furthermore, Germany is investing heavily in the bottleneck between Halle/Leipzig and Nürnberg, which is due to be completed in 2016. Italy has put into service the section Roma-Napoli and is investing heavily in the sections Milano-Bologna-Firenze, which should enter into service by 2009. The capacity bottleneck between Verona and Bologna will be eliminated by end 2008.



			Inve	estment bef	ore 2007 in M	EUR		Inv	estment 200	7-2013 in M El	JR			
	Estimated				Of which		Degree of			Of which		Degree of		Investment
MS involved	completion date	Total cost in M EUR	Total	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	after 2013 as % of total investment
BE, DE, NL, UK	2015	18,848.01	16,954.61	753.01	0.00	2,971.00	90.0%	1,857.07	29.78	0.00	0.00	99.8%	36.33	0.2%

Length of	Total		Works ongoing	Works completed	Works to be started	of	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	1124	in km	30	1094	0	which:	0	0	0
		in %	2,7%	97,3%	0,0%		0,0%	0,0%	0,0%

Completed: 1094 km

### High-speed railway axis Paris-Bruxelles/Brussel-Köln-Amsterdam-London: PBKAL

This is Europe's first cross-border high-speed passenger rail project, linking major cities in France, Belgium, Germany, the Netherlands and the United Kingdom.

The PBKAL network offers substantial reductions in journey times between the five countries and therefore provides passengers with a real alternative to air and road transport. Improved connections between some of Europe's key airports - Brussels, Frankfurt, Cologne/Bonn, Paris Charles de Gaulle and Amsterdam Schiphol will also make a significant contribution to the promotion of intermodal air-rail journeys, in line with Community transport policy objectives.

The French section linking Paris, Lille and Calais and the Channel Tunnel is complete, and has been in service since 1993.

The high-speed Brussels-Paris line has been in full service since 1997 serving more than six million passengers a year, having attracted very large numbers from road and air, with some flights being taken out of service as a result.

#### Cross-border sections

Construction of the Dutch line began in 2000, through a public-private partnership. The southern part, from Rotterdam to the Belgian border was completed in 2006.

Upgrading from the Belgian border to Düren is ongoing.

In Belgium, the line from Brussels to the French border came into operation in 1997, with high-speed services now operating to Paris, and through the Channel Tunnel to London.

In the United Kingdom, the section between London and the Channel Tunnel was completed on 14<sup>th</sup> November 2007. This now enables trains on the axis to travel from London's St Pancras Station along the Channel Tunnel Rail Link for onward travel to the continent with improved reliability and journey times (from London St. Pancras to Paris Gare du Nord in 2 hours 15 minutes and to Brussels in 1 hour 51). These routes now provide a real alternative to air travel between London and cities in continental Europe.

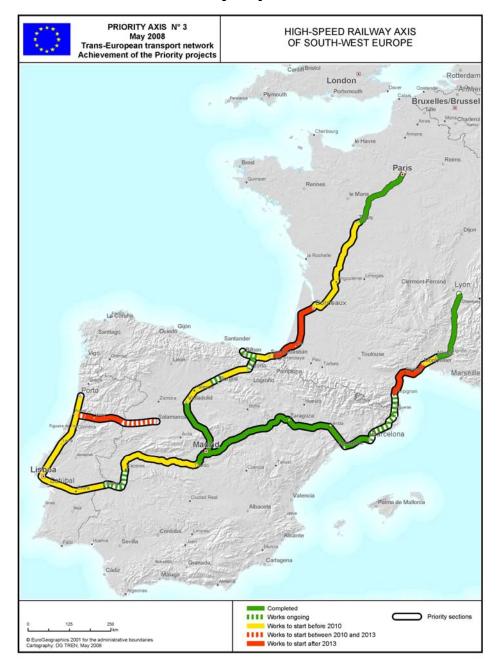
# Other sections

The northern section of the Dutch line from Amsterdam to Rotterdam was completed in 2007.

Works between Brussels-Leuven-Liège are complete and the high-speed line from Liège to the German border is scheduled for completion by the end of 2008.

The high-speed line from Antwerp to the Dutch border, including a new tunnel beneath the city of Antwerp, was finished in 2007. Commercial services started in 2008, although train sets equipped with European train control systems (ETCS) will only be available in 2012.

On the Brussels-Antwerp line, the by-pass project in Mechelen and the *Diabolo* project link with the national airport (Zaventem (Brussels airport)) will be completed by 2012.



			Invest	ment befo	re 2007 in M E	UR		Inve	stment 20	07-2013 in M E	UR			
	Estimated				Of which		Degree of			Of which		Degree of		Investment after
MS involved		Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	2013 as % of total investment
ES, FR, PT	2020	50,656.68	10,556.20	304.69	5,247.66	2,100.00	20.8%	26,782.65	671.88	1,437.02	1,650.00	73.7%	13,317.83	26.3%

				Works	Works to be				
Length of	Total		Works ongoing	completed	started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	3753	in km	431	1236	2085	or which.	1435	126	525
		in %	11,5%	32,9%	55,6%		38,2%	3,4%	14,0%

Completed: 1236 km

#### High-speed railway axis of South-West Europe

The high-speed rail link south-west Europe is essential for ensuring the continuity of the trans-European railway network. It will enable rail connections between the Iberian Peninsula (Portugal and Spain) and the rest of Europe without the need for reloading as a result of the difference in gauge between these networks. This rail link comprises two branches between France and Spain: a "Mediterranean" branch (Nîmes-Perpignan-Figueras-Barcelona-Madrid) and an "Atlantic" branch (Tours-Dax-Vitoria-Madrid) as well as a connection between Spain and Portugal (Madrid-Lisbon/Porto). Regular reporting has been made available to the European Parliament, the Council and the wider public through the annual activity reports of the European Coordinator, Mr Etienne Davignon.

# Mediterranean branch

Progress on the Mediterranean branch is uneven. Whereas the new line (660 km) between Madrid and Barcelona has been operational since February 2008, reducing the journey time between Madrid and Barcelona to 2 h 38 minutes, the connection towards France faces delays due to the need for better integration of the urban sections crossing Barcelona and Gerona. As the expected date to complete this connection is not until 2012, Spain has developed a transitional solution for the utilisation of the infrastructure from 2010.

Works on the cross-border section (Figueras–Perpignan) are ongoing. This section is being developed by a concession system (PPP). The planning of the French sections (Perpignan-Montpellier and Montpellier-Nîmes) is also facing delays. A more effective coordination between the two MS is therefore required to complete this branch.

#### Portugal-Spain

The Portuguese-Spanish sections of PP3 were developed with the aim of reducing journey times between Lisbon-Porto and Lisbon-Madrid to around 1h 15 minutes and 2h 45 minutes respectively. Interoperability with the standard European Gauge will also be achieved.

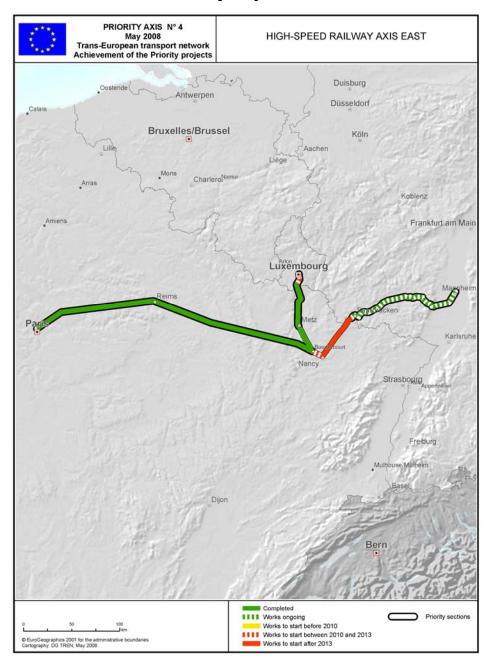
In Portugal, the activities started in 2001 with generic studies on High speed Connections (AVEP Study), with more in-depth studies taking place since 2004 on the sections between Lisbon-Porto and between Lisbon-Madrid. In 2007 both sections were regrouped under a single TEN-T project with a global investment of  $\in$  7.1 billion required. It is expected that Lisbon-Porto section will be operational in 2015. Construction works are expected to start by end 2009 with a total cost of  $\in$  4.5 billion. The Lisbon – Madrid high speed line is expected to be operational in 2013. In this case construction works will start in 2009 for a total cost of  $\in$  2.6 billion. This section includes a new crossing over the Tagus River.

In Spain, the works have already begun in the Cáceres – Mérida and Mérida – Badajoz sections. The total cost of the connection between Madrid and the Portuguese border is of € 3,3 billion. Studies of Salamanca – Aveiro section are being carried out by the European Group of Economic Interest AVEP.

## Atlantic branch

The project is being implemented very rapidly in Spain. The Madrid-Valladolid section of nearly 180 km, which includes a tunnel of 28 km, was brought into operation in December 2007. The Valladolid – Burgos and Burgos - Vitoria sections are in the pre-construction phase, and the works have begun at the Burgos by-pass. On the "Basque Y" several sections between Vitoria and Bilbao are under way. Works have also begun in some sections of the branch linking Vitoria to the French border – due to be completed by 2013. The existing Vitoria-Dax European Group of Economic Interest (EEIG) will be soon complemented by an Intergovernmental Commission, in line with the proposal of the European Coordinator, which was endorsed by the two MS in January 2008. In this framework too, coordination is crucial in order to ensure the proper implementation and utilisation of this future infrastructure which will be used by freight as well as passenger transport.

French planning is less advanced since the construction of the cross-border section is not planned before 2013 at the earliest. The Dax-Bordeaux link was the subject of a "public debate" in 2006. The French government plans to enable shared use of a part of the infrastructure with the future Bordeaux-Toulouse high-speed line. The cost range has to be specified, with commissioning being set for 2020. As far as the Bordeaux-Tours section is concerned, the French Government has decided that the line should be the subject of a concession. The call for bidders was launched at the end of 2006 and a concessionaire is expected to be chosen by the end of 2008. The Tours-Bordeaux high-speed line is due to be completed by 2017.



Ī				Invest	ment befo	re 2007 in M E	UR		Inves	stment 200	7-2013 in M EU	R			
		Estimated				Of which		Dogran of			Of which		Doggoo of		Investment after
	MS involved	completion date	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	Degree of completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	Degree of completion in 2013	Investment after 2013	2013 as % of total investment
I	FR, DE	2013	5,255.00	4,521.60	20.33	0.00	300.00	86.0%	590.60	10.00	0.00	0.00	97.3%	142.80	2.7%

				Works	Works to be				
Length of	Total		Works ongoing	completed	started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	603	in km	137	390	76	or willer.	0	24	52
		in %	22,7%	64,7%	0		0,0%	4,0%	8,7%

Completed: 390 km

### High-speed railway axis east

The project aims to connect the high-speed rail networks of France and Germany, as well as improve the railway link between France and Luxembourg. Its three parts are:

- a new 300 km long high-speed, passenger-only rail line from Paris to Baudrecourt (near Metz) with a commercial speed of 320 km/h;
- the upgrading of the Saarbrücken–Mannheim section (on the Paris–Metz–Frankfurt–Berlin railway corridor), for 200 km/h running;
- the upgrading of the Metz- Luxembourg line.

The progress along this railway axis is very good, with the project well on the way to completion.

#### Completed sections

#### Paris-Baudrecourt

The construction of the new high-speed line between Paris and Baudrecourt started in January 2002 and was completed in summer 2006. The new line has been in operation since summer 2007 and has cut journey times from Paris to Strasbourg to 2 hours and 20 minutes; from Paris to Metz and Nancy to 1 hour and 30 minutes; from Paris to Reims to 45 minutes; and from Paris to Luxembourg to 2 hours and 15 minutes. The section was co-financed under the TEN-T multi-annual work programme 2001-2006 with an amount of € 158, 33 million. France also obtained an EIB loan of € 300 million for the works on this section. These contributions facilitated the rapid completion of the section Paris-Baudrecourt.

## Cross-border section Luxembourg-Metz-Baudrecourt

Works on this section were completed and it has been operational together with the line Paris-Baudrecourt since 2007.

#### Cross-border sections to be completed

### Saarbrücken-Mannheim

In Germany, upgrading work on the Saarbrücken–Mannheim section, to allow the use of 200 km/h tilting trains, is due to be completed by 2013. The section was co-financed under the TEN-T multi-annual work programme 2001-2006 with an amount of € 25, 33 million and a further € 10 million is to be allocated in the period 2007-2013.

# Baudrecourt-Saarbrücken - non-priority section of the axis

This section Baudrecourt-Saarbrücken consists of an existing railway line between Germany and France. No upgrading works are planned for this section before 2013.



			Inve	stment befo	re 2007 in M E	UR		Inve	stment 200	7-2013 in M E	JR			
	Estimated				Of which		Degree of			Of which		Degree of		Investment after
MS involved	completion date	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	2013 as % of total investment
FR, HU, IT, SI	2025	60,741.96	7,827.03	334.02	77.48	184.00	12.9%	10,427.94	754.50	874.85	369.41	30.1%	42,486.98	69.9%

				Works	Works to be				
Length of	Total		Works ongoing	completed	started	of which	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	1688	in km	158	190	1340	of which:	92	724	524
		in %	9,4%	11,3%	79,4%		5,4%	42,9%	31,1%

Completed: 190 km



# Railway axis 'Lyon-Trieste-Divača/Koper-Divača-Ljubljana-Budapest-Ukranian border'

The railway axis 'Lyon-Trieste-Divača-Koper-Divača-Ljubljana-Budapest-Ukranian border' is an important east-west link crossing the Alps between Lyon and Turin and between Italy and Slovenia. Four Member States are involved in the project: Hungary, Slovenia, Italy and France. It is a fundamental link in the European transport network that will be able to absorb part of the continuing growth of traffic flows between the south-east, central part and south-west of Europe. An important increase in rail freight capacity will be achieved and will help to realise a modal shift in the sensitive mountainous regions. Progress on this railway axis is mixed. Regular reporting has been made available to the European Parliament, the Council and the wider public through the annual activity reports of the European Coordinator, Mrs. Loyola de Palacio, and her successor, Mr Laurens Jan Brinkhorst.

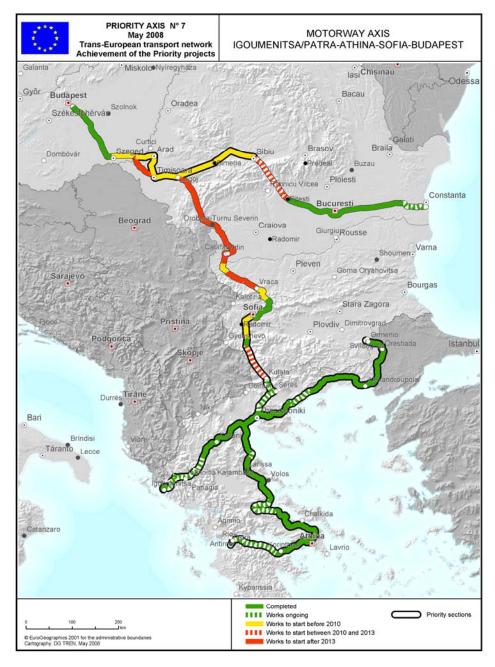
#### Cross-border sections

The Lyon-Turin section constitutes the core section of this priority project. It comprises the Lyon-Turin Base Tunnel and the access routes. Work on the actual Lyon-Turin Base Tunnel has not started, only the exploratory tunnels on the French side are in the process of being finalised. On the Italian side, no decision has yet been taken on the alignment of the line, rendering obtaining permits and full environmental impact assessments difficult. The cross-border section between Trieste and Divača is also a key element of this project. Work on Trieste-Divača is still at an early stage with a decision on the alignment anticipated by June 2008. Notwithstanding the political commitment repeatedly expressed by the Member States involved, the current situation on both of these cross-border sections could be improved.

The works on the Lyon-Turin Base Tunnel are scheduled to start in 2011 and to be completed in 2023. A protocol was signed by the French Government, the local governments and RFF, in March 2007, for financing a first phase of the access routes to the Base tunnel. An Italian decision on the alignment, together with clear financial commitments is necessary to realise this time path. The European Commission has reserved € 671,8 million for the works on the Base tunnel for the 2007-2013 period.

On the Trieste-Divača section encouraging progress was made in 2007, culminating in the first Intergovernmental Conference between Italy and Slovenia in December. The final alignment of the Trieste-Divača line has not yet been decided upon. Concerning the continuation of the line from Divača through Slovenia and Hungary to the Ukrainian border, clarification concerning final alignment and financial commitments would be very helpful.

Political commitment by the Member States and subsequent follow-up actions at EU and Member States' level are crucial to the timely realisation of PP6.



			Inve	stment before	2007 in M EU	IR		Inv	estment 200	7-2013 in M El	JR			
	Estimated				Of which		Degree of			Of which		Degree of		Investment after
MS involved	completion date	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	2013 as % of total investment
BG, GR, RO	2020	14,779.70	10,051.10	66.20	4,658.83	4,223.00	68.0%	4,727.60	3.48	2,444.40	440.00	100.0%	1.00	0.0%

				Works	Works to be				
Length of	Total		Works ongoing	completed	started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	3333	in km	609	1593	1131	oi wilicii.	524	189	418
		in %	18,3%	47,8%	33,9%		15,7%	5,7%	12,5%

Completed: 1593 km

### Motorway axis Igoumenitsa/Patra -Athina -Sofia -Budapest

This motorway project will provide significant improvements to the road network of south-eastern Europe. The initial plan for this axis involved the construction of two new motorways across Greece. The first, which runs from west to east following the route of the *Via Egnatia*, will connect the port of Igoumenitsa to Kipi on the Greek-Turkish border (680 km). The second road consists of the modernisation of the existing 800km *Pathe* road (Patras-Athens-Thessaloniki and Evzoni), which runs from Southern Greece to the north, connecting Patras to Promahon on the Greek-Bulgarian border

Extensions to this axis were adopted in 2004, adding connections from the north of Greece towards the neighbouring countries, and from there towards Central Europe. The first branch of these extensions runs along the pan-European corridor IV from the Greek-Bulgarian border at Promahon to Nadlac, linking Thessaloniki to Sofia and to Nadlac on the Romanian-Hungarian border. The other branch runs in the direction of the port of Constanta, via Bucharest.

#### Cross-border sections

**Greece –Bulgaria:** The cross-border section Promaxonas/Kulata is completed.

**Bulgaria –Romania:** The rail/road bridge Calafat–Vidin, on the Danube, is under construction, with financial support from Structural Funds. It will be completed in 2010.

Romania -Hungary: The section will be completed during the 2007-2013 programming period.

### Other sections

**Greece:** On the *Via Egnatia* section, around 80% is already completed. The remaining 134 km are in construction with completion planned for the end of 2008. On the Ardanio-Ormenio-Bulgarian border section of 124km, around 72% is already completed. The remaining 34 km are under construction.

On the *Pathe* road, 70% is already completed. The remaining 240 km is in construction. The completion date of work is planned for 2012.

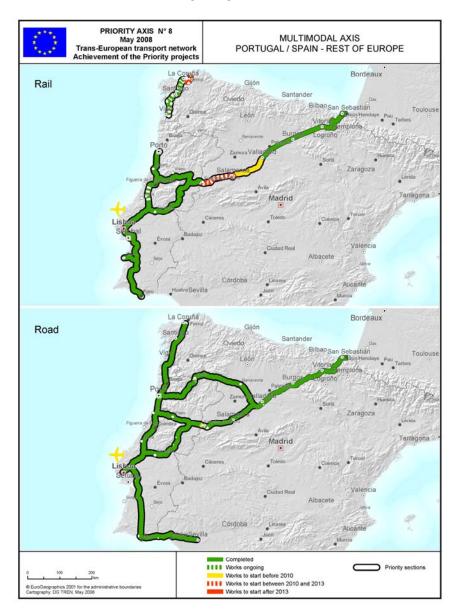
**Bulgaria:** Bulgaria intends to invest a major part of its Cohesion Fund 2007-2013 on the motorway route Sofia–Kulata (the *Stuma* motorway). However, serious environmental constraints could lead to delays on a 56km section at the "Kresna Gorge".

Regarding the section Vidin – Sofia, the section Sofia-Botergrand is completed. Works in two sections of 50Km in total will start before 2010. The rest after 2013. The largest section to the north of Sofia (as far as Montana) is completed. Work is due to commence by 2010 on the 20 Km section Montana-Vidin (Romanian border).

Romania: Romania has already carried out a number of important investments on the northern branch of PP7, notably the section Nadlac–Bucuresti–Constanta. Certain sub-sections are already complete (Pitesti–Bucuresti–Cernavoda), and the section Cernavoda–Constanta is in construction. For the period 2007-2013 Romania will undertake works on the section Nadlac–Pitesti. Works in Sibiu-Pitesti will not be completed until 2013.

Romania is not planning to invest heavily in the section Arad–Calafat towards Bulgaria and Greece. Only a few minor rehabilitation projects are envisaged.

**Hungary:** The M5 road link from Budapest to Szolnok was completed in 2006. Work on the remaining section from Szeged to the Romanian border is in preparation and is due to be completed in the 2007-2013 programming period, using the support of the Cohesion Fund.



Ī				Inve	stment befo	ore 2007 in M E	EUR		Inve	stment 200	7-2013 in M EU	R			
ı		MS Estimated Total co				Of which		Degree of			Of which		Degree of		Investment
	MS involved	completion date	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	after 2013 as % of total investment
ĺ	ES, PT	2017	15,324.54	8,882.71	31.76	2,841.23	1,782.49	58.0%	4,752.97	69.00	270.66	7.15	89.0%	1,688.86	11.0%

Length of	Total		Works ongoing	Works completed	Works to be started		Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	1857	in km	222	1397	238	of which:	108	130	0
(Rail)		in %	12,0%	75,2%	12,8%		5,8%	7,0%	0,0%

Length of	Total		Works ongoing	Works completed	Works to be started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
(Road)	2372	in km	30	2320	22	oi wilicii.	22		
(NOdu)		in %	1,3%	97,8%	0,9%		0,9%	0,0%	0,0%

Completed: 3717 km

#### Multimodal axis Portugal/ Spain-rest of Europe

This axis will reinforce multimodal corridors linking Portugal and Spain, contributing to the improvement of links between the centre of the EU and its peripheral regions, and the strengthening of the Iberian peninsula's position as a western European gateway.

It includes sub-projects to improve routes across the Spanish-Portuguese border, linking Spanish cities such as Valladolid, Seville, Vigo and La Coruna, with Portugal's principal sea ports and airports, and its large urban centres - Porto and Lisbon in particular. As part of wider infrastructure investments, it complements existing rail, road, maritime and air routes in the west of the Iberian peninsula, and will link the main Portuguese and Spanish sections of the trans-European transport network. The project also includes the construction of the new Lisbon Airport.

Overall, the axis involves the construction of 2 265 km of new motorways, upgrading of 1 067 km of conventional rail lines, and upgrading/construction of Atlantic ports and a key airport.

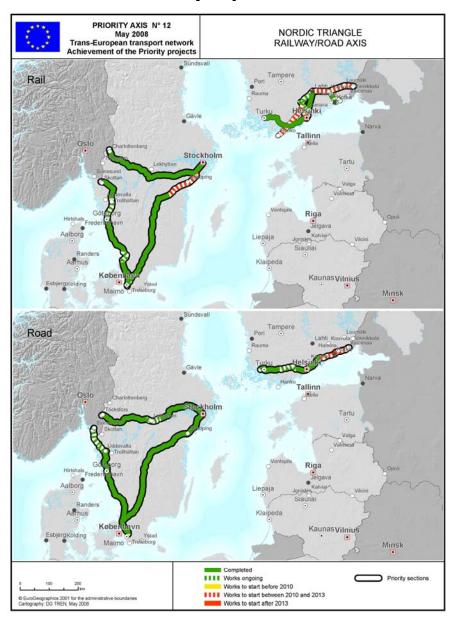
# ES/PT bottleneck sections

In Portugal the motorway works have all been completed. Within the framework of the multi-annual work-programme (2007-2013), the co-financing of € 69 million (studies and works) is foreseen for the development of the new Lisbon airport, representing a global investment of € 4 billion. It is scheduled to be fully operational in 2017.

On the Spanish side, motorway links between Lisbon and La Coruna and Lisbon and Seville are complete. The Valladolid-Porto section of motorway is nearly complete with the final section from Verin to the border already under construction.

The southern motorway from Valladolid to the Portuguese border is also progressing well. Work between Valladolid and Ciudad Rodrigo is complete and the section Ciudad-Rodrigo to Fuentes de Oñoro will be operational by end of 2008. Moreover works will start shortly on the remaining section from Fuentes de Oñoro to the border with Portugal.

Regarding the railways, substantial works on electrification, track doubling and other upgrading has already been carried out on the main railway lines in Portugal. On the Spanish side a substantial upgrading is taking place between La Coruña (Ferrol) and Vigo - close to the Portuguese border to create a High Performance Line. Most the line is under construction, and some sections are complete. The upgrading involves some modifications to the layout of the line. The line Valladolid - Fuentes de Oñoro is also being upgraded to create a High Performance Line. The section Medina del Campo-Salamanca-Fuentes de Oñoro is in the pre-construction phase.



			Inves	tment befo	re 2007 in M E	UR		Inve	stment 200	07-2013 in M El	JR			
	Estimated				Of which		Degree of			Of which		Degree of		Investment after 2013
MS involved	completion date	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	as % of total investment
FIN, S	2016	11,746.37	4,364.40	257.28	0.00	1,425.00	37.2%	5,705.37	155.49	0.00	0.00	85.7%	1,676.60	14.3%

Length of	Total		Works ongoing	Works completed	Works to be started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
(Rail)	2170	in km	380	1353	437	oi wilicii.	0	312	125
(Naii)		in %	17,5%	62,3%	20,1%		0,0%	14,4%	5,8%

Length of the PP in	Total		Works ongoing	Works completed	Works to be started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
km (Road)	1800	in km	209	1476	114	or willen.		114	
KIII (Koau)		in %	11,6%	82,0%	6,3%		0,0%	6,3%	0,0%

Completed: 2829 km

#### Nordic triangle railway/road axis

The Nordic Triangle transport corridor links the Nordic countries and their capitals to each other and improves passenger and freight transport from the region to central Europe, the Baltic countries and Russia. This multimodal scheme involves upgrading road, rail and maritime infrastructures in Sweden and Finland in order to improve transport links between the Øresund fixed link, (*Priority project No 11*), Stockholm, Oslo, Turku, Helsinki and the Finnish–Russian border.

### Bottlenecks

**SWEDEN:** the Nordic Triangle in Sweden extends from Malmö (and the Öresund fixed link) to Stockholm and the Swedish/Norwegian border and from Stockholm to Oslo.

**Roads:** works on the routes Stockholm-Oslo and Copenhagen-Oslo are progressing well with a number of projects already in construction and others in preparation. Regarding the connection Stockholm-Copenhagen, preparations for a bypass in Stockholm are on-going while some bottlenecks remain on the section between Södertälje and Stockholm. Between Stockholm and Oslo, the section Karlstad-Norwegian Border has encountered design problems and discussions are taking place with the Norwegian authorities.

**Rail:** a number of major projects are in construction including the "Citybanan project" (Stockholm) and, on the Copenhagen-Oslo line, the "Citytunneln" (Malmö), the tunnel Hallandsåsen, Göteborg-Trollhättan and Falkenberg. Others are in the preparation phase (e.g Ostlänken Södertälje-Linköping on the Stockholm-Copenhagen line). Works to alleviate a number of severe bottlenecks will also need to be undertaken.

**FINLAND**: The Nordic Triangle in Finland covers road and railway connections from Turku through the Helsinki Metropolitan Area to the Russian border.

Roads: the Nordic Triangle road connection in Finland consists of Road E 18 from the ports of Turku and Naantali via Helsinki to the Russian border (Vaalimaa border station). The section Turku–Helsinki will be of motorway standard when the remaining 50-kilometre road section Muurla–Lohja is completed by the end of 2008. Two motorway sections and the Hamina by-pass road in the section Helsinki – Vaalimaa are yet to be implemented, and upgrading work on a busy section of Ring Road III in the Helsinki Metropolitan Area also remains to be carried out. Moreover, a lorry parking area is under construction.

Rail: The Nordic Triangle railway network in Finland consists of sections: Turku-Helsinki, Helsinki-Riihimäki, Riihimäki-Lahti, Kerava-Lahti, Lahti-Luumäki, Luumäki-Vainikkala, Kouvola-Kotka/Hamina and Hyvinkää-Hanko. The new Vuosaari harbor line and airport line in Vantaa will also be part of Nordic Triangle. The Kerava-Lahti line is completed. The Vuosaari harbor line will be completed in 2008. Constructions of the airport line will start in 2009. Preparations are underway regarding the lines Lahti-Luumäki-Vainikkala and Kouvola-Kotka/Hamina. There will be also improvements in future years on the lines Turku-Helsinki, Helsinki-Riihimäki and Hyvinkää-Hanko.



			Inves	stment befor	e 2007 in M EU	R		Inve	stment 200	7-2013 in M EU	JR			
MS involved Estimated completion date	Total cost in			Of which		Degree of			Of which		Degree of	Investment	Investment after	
	completion date	M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	after 2013	2013 as % of total investment
IRL, UK	2015	7,526.44	3,285.65	66.23	450.27	260.00	43.7%	4,057.80	80.71	0.00	236.00	97.6%	182.99	2.4%

Length of the PP in - km -	Total		Works ongoing	Works completed	Works to be started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
	1690	in km	1375	315	0	OI WIIICII.			
		in %	81,4%	18,6%	0,0%	1	0,0%	0,0%	0,0%

Completed: 315 km



#### Road axis United Kingdom/Ireland/Benelux

This axis will improve road transport between Cork, Dublin and Belfast, complementing the development of Ireland's main east-coast rail line (PP9). It will also provide upgraded links to mainland Europe via ferry links to Scotland and Wales, the Al4 and M6 roads across England, and the North Sea ferry ports of Felixstowe and Harwich. The 1 500 km route includes both the construction of new roads, mainly in Ireland, and the upgrading of existing roads to motorway, expressway, dual-carriageway and high-quality single-carriageway standards, appropriate to traffic density.

These schemes, when taken together, will lead to shortened journey times, a reduction in the number of bottlenecks, fewer accidents and a reduced impact upon the environment.

### IE/UK bottleneck sections

In Ireland, construction of the MI Dundalk western bypass was completed in September 2005. As regards the southern leg (Dublin-Cork), the upgrade of the N7 from Rathcoole to the Naas bypass was completed in August 2006, and the M8 Fermoy-Watergrasshill scheme in October 2006.

In the UK section, significant construction has been undertaken. In England this includes completion of the A120 Stansted-Braintree, as well as the M6 Toll road, helping to improve safety and relieve key bottlenecks on the network. In Wales the A55 has been dualled allowing improved access along the North Wales coast to the port of Holyhead. In Scotland improvements have been made to the A75 to the port of Stranraer. In Northern Ireland the dualling of the A1 Loughbrickland to Beech Hill was completed in 2006.

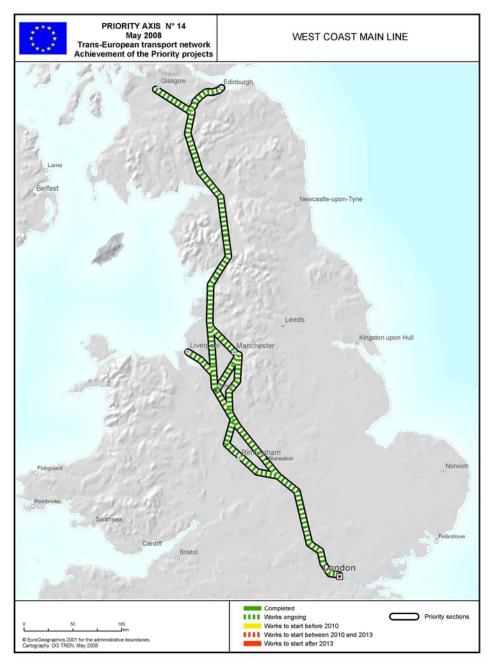
In England further work has started on relieving key bottlenecks on the A5117 at Deeside Park, the M6 Carlisle to Guardsmill and on the A14 between Haughley and Stowmarket. Further improvements are planned to remove the bottleneck on the A14 between Ellington and Fen Ditton and at Junction 19 of the M1 (junction with A14). In Wales the focus is on making further improvements to the North East corridor. In Scotland, continuing improvements to the A75 in Dumfries and Galloway are planned to allow for overtaking of slower moving vehicles and relieve congestion. In Northern Ireland work is being taken forward to remove bottlenecks on the M1 Westlink, the M2 and the A1 Beech Hill-Cloghogue. Work is also planned to further improve the A8 to the port of Larne.

Within the framework of the multi-annual work-programme (2007-2013), the co-financing of € 80,71 million (works) for improvements and upgrade of road infrastructure on sections of the A1 in Northern Ireland and the A14 and M6 in England is foreseen.

# Cross-border section

The cross-border section from N1 Dundalk to the border with Northern Ireland received TEN-T grants in the 2001-2006 programming period and it is now complete.

The project was related to the completion of the construction of 19 km of dual carriageway from Dundalk to Newry (4.6 km lie on UK territory/14.5km are south of the border), which replaced an existing inadequate transfrontier link on the Dublin-Belfast corridor.



Ī				Inves	tment befo	re 2007 in M E	EUR		Inve	stment 200	17-2013 in M E	JR			
		Estimated	<b>-</b>			Of which		Degree of			Of which		Degree of		Investment after
	MS involved	completion date	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	2013 as % of total investment
	UK	2009	12,629.24	10,896.37	79.60	0.00	1,142.00	86.3%	1,732.87	0.00	0.00	0.00	100.0%	0.00	0.0%

				Works	Works to be				
Length of	Total		Works ongoing	completed	started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	928	in km	928	0	0	oi wilicii.	0	0	0
		in %	100,0%	0,0%	0,0%	1	0,0%	0,0%	0,0%

Completed: 0 km

#### West coast main line

The west coast main line (WCML) is the most important trunk route in the United Kingdom's rail network with some 2 000 train movements per day. It links London and the south-east with England's largest conurbations (Birmingham and Manchester), as well as with Liverpool, North Wales, the North-West, Cumbria and Scotland, covering a distance of 850 km.

The WCML project will modernise the line, renewing and enhancing the infrastructure to provide improved journey times, greater capacity for trains, and better and more resilient performance of track, signaling and other assets.

In London, the upgraded line can connect with the Channel Tunnel rail link (PP2), making possible the development of further through services between the UK and mainland Europe.

The project will cut passenger and freight journey times between Ireland, Scotland, the north of England and France, Belgium, the Netherlands and Germany. Improved speed and convenience are expected to attract new users on these international routes, helping to shift traffic from the roads. Journey times from London to Manchester and Glasgow will be reduced to 2 hours, and around 4 hours 15 minutes respectively by end 2008.

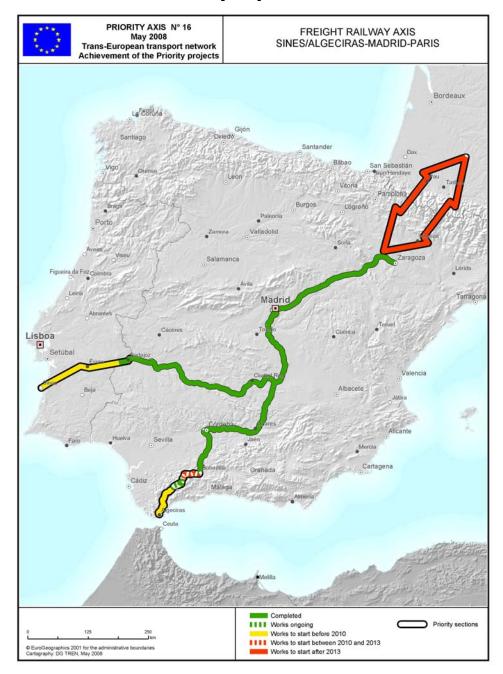
# Bottleneck sections

The route is the core national long-distance freight route and 43 % of all UK rail freight traffic uses the WCML for some or all of its journey. There are also significant commuting flows on the route around London, Manchester, Glasgow and Birmingham. Therefore most of its sections are considered as bottlenecks.

Extensive renewal and enhancement works have already been completed. For example, re-signalling and re-modelling at London's Euston Station, at Willesden and in the Stoke-on-Trent area have all been completed, along with line-speed upgrades between Euston and Crewe.

Although work on the modernisation programme is scheduled to finish in 2009, a number of schemes will further enhance the axis between now and 2013. These are likely to include works at Stafford and Bletchley. In addition there are related works planned at Reading, which aim to remove a bottleneck for freight traffic accessing the WCML from the Port of Southampton.

This project received TEN-T grants totalling € 78, 6 million up to 2006.



			Invest	ment befo	re 2007 in M E	UR		Inve	stment 200	07-2013 in M El	JR			
	Estimated	T.4.1 4			Of which		Degree of			Of which		Degree of	I	Investment after
MS involved	completion date	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	2013 as % of total investment
ES, PT	2020	8.899.04	48.80	0.00	7.65	0.00	0.5%	1,100.34	5.00	270.90	0.00	12.9%	7.749.90	87.1%

Length of	Total		Works ongoing	Works completed	Works to be started		Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	1497	in km	49	1140	308	of which:	230	78	0
		in %	3,3%	76,1%	20,6%		15,4%	5,2%	0,0%

Completed: 1140 km

#### Freight railway axis Sines/Algeciras-Madrid-Paris

The project aims to develop a high-capacity freight railway axis linking the ports of Algeciras in southern Spain and Sines in south-western Portugal with the centre of the EU. The scheme also involves the construction of a new high-capacity rail link for freight across the Pyrenees, connecting the French and Spanish networks. The railways lines will be built in European gauge therefore achieving full physical interoperability and improving inter-connection of networks. The project also includes the construction of a long-distance tunnel. Several possible alignments are under consideration.

The rail link across the Pyrenees will complete a major European trade route from Portugal and Spain to the rest of Europe on which significant future traffic growth is forecast. The construction of this new line, in European gauge, is expected to enable rail to achieve a 30 % share of the land transport market in the Pyrenees.

#### Cross- border sections

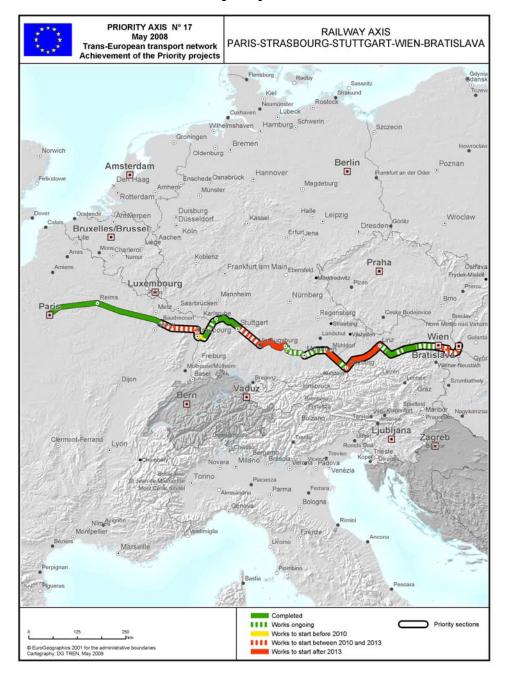
For the trans-Pyrenean link, initial studies and detailed cross-border surveys have been carried out by the neighbouring regions (Aragon, Aquitaine, Midi-Pyrénées) working together through the TCP (Traversée Centrale des Pyrénées) organisation. The Spanish and French governments have been monitoring traffic flows through the Pyrenees, and the rail link is discussed at the regular summits regarding regional cooperation in the Pyrenees area. At the recent Spanish-French Summit in January 2008, both countries ratified a Joint Studies Plan. The goal is to finish the studies necessary to allow the launching of the informative and consultation procedures by 2013.

Within the framework of the 2007-2013 multi-annual work-programme, the co-financing of € 5 million for studies for the construction of the new high capacity line through the Pyrenees is foreseen.

#### Other sections

The new Sines-Badajoz and Algeciras-Bobadilla lines are critical for the development of the ports of Sines and Algeciras and will foster traffic between Lisbon, Setúbal, Sines and Algeciras, and central Spain and the rest of Europe. Their construction in European gauge will facilitate full interoperability and higher speeds between the Portuguese and Spanish freight networks and the rest of the trans-European rail network.

On the Spanish side, regarding the Algeciras-Bobadilla rail link, detailed studies have been prepared, with works already started on the sections of Ronda-Cortes and Cortes-San Pablo. The section San Pablo-Algeciras is in the pre-construction phase, and studies for the section Ronda-Antequera are being completed. On the Portuguese side, both final alignment and environmental studies are being carried out for the section Sines-Badajoz. The Spanish and Portuguese governments have also agreed to add a third track on the cross-border section.



			Investr	nent befo	re 2007 in M	EUR		Inves	tment 200	7-2013 in M	EUR			
	Estimated				Of which		Degree of			Of which		Degree of		Investment
MS involved	completion date	Total cost	Total	TEN-T budget	Structural / Cohesion	EIB	completion end 2006		TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	after 2013 as % of total investment
AT, FR, DE, SK	2020	13.563,29	3.528,68	139,34	0,00	140,00	26,0%	6.779,99	438,33	440,74	600,00	76,0%	3.254,62	24,0%

Length of	Total		Works ongoing	Works completed	Works to be started		Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	1298	in km	266	466	566	of which:	20	271	274
		in %	20,5%	35,9%	43,6%		1,6%	20,9%	21,1%

Completed: 466 km

#### Railway axis Paris-Strasbourg-Stuttgart-Wien-Bratislava

The railway axis 'Paris-Strasbourg-Stuttgart-Wien-Bratislava' is an east-west oriented axis crossing very densely populated areas in the centre of Europe. It touches upon four Member States: France, Germany, Austria and Slovakia. The progress along this railway axis is good. Regular reporting has been made available to the European Parliament, the Council and the wider public through the annual activity reports of the European Coordinator, Mr. Péter Balázs.

#### Cross-border sections

Bilateral agreements were signed for each of the cross-border sections which will all be developed during the present financial programming period.

A bilateral treaty governing the Strasbourg-Kehl-Appenweier section and in particular the bridge over the river Rhine was signed on 14 March 2006. Works have already started on the French part of this section and the construction of the new bridge will be launched officially in July 2008. The whole section should be completed by 2010/11, including the interconnection in Appenweier, where a fly-over is being studied.

A bilateral agreement governing the Munich-Salzburg cross-border section (Freilassing – Salzburg) and in particular the bridge over the river Saalach was signed on 10 July 2007. Works are due to start in 2010 and should be completed in 2013; however, the cross-border environmental impact assessment (EIA) has not been completed yet.

A bilateral agreement on the Wien-Bratislava cross-border section was signed on 11 July 2007. Works are due to start in 2010 and should be completed in 2013. Preparatory works for Wien main station already started in 2007. Works for other Austrian sections are due to start in 2011 and should be completed by 2015.

#### **Bottlenecks**

Three major bottlenecks were identified by the European Coordinator. Each of the sections is progressing. The section crossing the 'Vosges du Nord' between Baudrecourt (Lorraine) and Vendenheim near Strasbourg is foreseen to be constructed between 2010 and 2015. Preparatory works and finalisation of the detailed studies are already under way.

The section between Stuttgart and Ulm is probably the most complex bottleneck to be dealt with on this railway axis. An agreement was signed between the German Minister of Transport, Deutsche Bahn AG and the regional authorities on 19 July 2007. The section will be constructed between 2010 and 2020.

The section between St.Pölten and Wien is progressing well. On 3 September 2007, the excavation works of the Wienerwald tunnel (13 km) were finalized. The whole section should be completed by 2013.

# Other sections

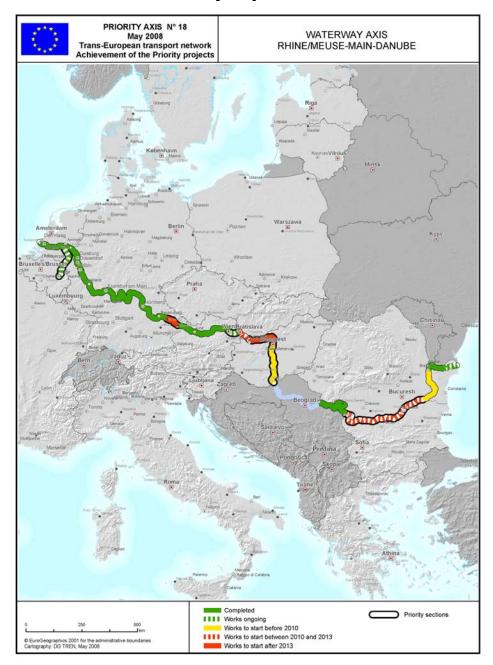
In France, the first phase of the eastern European high-speed rail line was put into service on 10 June 2007. 300 km of new high-speed line allow very important time gains, in France and beyond. The operation is a big success, also regarding the new services between Paris and Stuttgart/München.

In Germany, important sections between Appenweier-Karlsruhe and Stuttgart have already been completed. The works between Augsburg and München are ongoing and will be completed by 2010, allowing for important increases in capacity and speed (up to 230/250 kmh). Between München and Mühldorf initial works started in 2007. However, a way forward for the entire section from München to Mühldorf still has to be defined. Furthermore, the section between Ulm and Augsburg still needs to be studied in detail.

In Austria, important works have been ongoing for several years in order to increase speed and capacity between Linz and Wien. Four tracks should be available along the entire route by 2013. Further works on some sections between Salzburg and Linz are scheduled as of 2013.

In Slovakia, the detailed studies are under preparation for launching all necessary works, connecting Bratislava and its airport with Wien and beyond. The EIA process has been successfully completed.

This rail link is making real progress and might be very largely completed by the year 2015, with certain sections being finalised by 2020.



			Inves	tment befor	re 2007 in M El	JR		Inve	stment 2007	-2013 in M EUF	₹			
					Of which		Degree of			Of which		Degree of		Investment after
MS involved	Estimated completion date	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	2013 as % of total investment
AT, BE, BG, DE, HU, NL, RO	2016	2,103.28	45.29	14.60	21.95	17.00	2.2%	1,075.55	190.20	245.00	0.00	53.3%	982.44	46.7%

Length of	Total		Works ongoing	Works completed	Works to be started	of which.	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	3255	in km	292	1781	1182	of which:	390	572	220
		in %	9,0%	54,7%	36,3%		12,0%	17,6%	6,8%

Completed: 1781 km

# Waterway axis Rhine/Meuse-Main-Danube

The Priority Project 18 crosses Europe transversally from the North Sea at Rotterdam to the Black Sea in Romania. The Meuse and the Rhine rivers are the entrance gates for the Belgian and the Dutch inland waterways to this Priority Project corridor. The Main canal connects Rhine River to the Danube, which flows into the Black Sea. This corridor is one of the longest ones in the Trans European Transport Network and crosses both EU and non-EU countries.

Along with PP30, Canal Seine-Scheldt, and in recognition of its complexity and multifaceted aspects, the European Commission has appointed Mrs. Karla Peijs as European Coordinator for Inland Waterways.

Besides the TEN-T Programme, other European Programmes are active on certain stretches of the Danube: the former ISPA Programme has financed studies and is about to finance construction for the improvement of navigation in Romania at Calarasi-Braila as well as in the long border section between Romania and Bulgaria. At the same time, activities for the restoration of navigability on the Danube stretch in Serbia are undertaken with the support of the European Commission.

#### Cross-border sections

The construction works for the improvement of navigability in the Maasroute in The Netherlands and the construction of a new lock for larger barges in Lanaye represent the engagement for the establishment of a capacity continuity at the crossing between Belgium and The Netherlands. Works on the Maasroute started in 2007.

East of Vienna and until the Slovak border, studies and a pilot project are being financed to guarantee the reliable and consistent navigation capacity throughout the year, while preserving a Natura 2000 area.

#### **Bottlenecks**

There are two key bottlenecks on the axis.

The one in the Straubing-Vilshofen area, in Bavaria (Germany), concerns a 70 km stretch of the Danube. It is at the centre of a long lasting debate between local entrepreneurs and European environmentalists. The entrepreneurs are requesting the construction of a lock, in Aicha, that, according to recent studies, would guarantee 2.5 meters depth for more than 290 days per year. The environmentalists argue that this is the last "free flowing" stretch and that the lock would cause the destruction of wet lands and of the natural habitat. They claim that only limited infrastructural works are needed for flood protection and that these will be sufficient to guarantee sustainable navigability.

The German Federal government, together with the Bavarian State government have decided to launch a new three year study that will analyse solutions between these two positions, including the analysis of the impact on the overall regional transport system in case inland navigation will be able to attract part of the traffic.

The Coordinator Mrs. Peijs has recently met representatives of both sides and has proposed that the study will be monitored by both in order to ensure the respect of European Environmental Directives, while evaluating the necessary works for sustainable inland navigation.

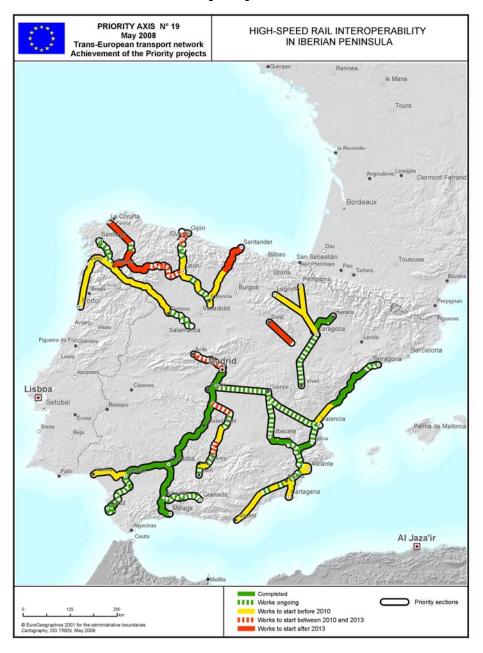
The second important bottleneck is relevant to the Danube River in Hungary where these are more than thirty points where navigability is endangered by the low waters and by the unstable main flow of the river. Studies are about to be launched for the identification of measures and interventions to be adopted.

# Other sections

Additional important activities on this project will take place on the Belgian stretch to build a new lock at Ivoz-Ramet and to launch studies for the construction of a new lock at Ampsin-Neuville that will allow the transit of barges of more than 3000 tons.

Further improvements to the navigability in the Bavarian stretch will involve the reconstruction of the rail bridge at Deggendorf. This will allow a safer navigation in a site where the existing bridge pillars represent a dangerous bottleneck.

The horizon of all these activities is quite scattered due to the variety of required interventions, the issues at stake and the number of countries involved.



			Inves	ment befo	ore 2007 in M E	UR		Inves	stment 200	7-2013 in M EU	IR			
	Estimated	Total cost			Of which		Degree of			Of which		Degree of	lucca atom a set	Investment after
MS involved	completion date	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	2013 as % of total investment
ES, PT	2020	41,770.45	5,236.30	84.40	2,742.40	700.00	12.5%	33,194.37	267.00	3,102.60	300.00	92.0%	3,339.78	8.0%

				Works	Works to be				
Length of	Total		Works ongoing	completed	started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	4776	in km	1448	1090	2238	oi wilicii.	1349	412	477
		in %	30.3%	22.8%	46.9%		28.2%	8.6%	10.0%

Completed: 1090 km



#### High-speed rail interoperability in Iberian Peninsula

The difference in gauges between the rail networks of the Iberian Peninsula and the rest of the European Union remains a major obstacle to the efficient operation of Europe's rail transport system. This project involves the construction of new lines and the installation of dual-gauge sleepers, third rails or axle-gauge changeover stations on the Spanish and Portuguese high-speed rail networks, in order to make them fully interoperable with the rest of the trans-European rail network.

The project will provide access to the biggest cities of Spain and Portugal by high-speed train and will target five corridors: Madrid-Andalusia, north-east, Madrid-Levante/Mediterranean, north/north-west corridor, including Vigo-Porto, and Extremadura. The project will be implemented in compliance with Directive 96/48/EC on interoperability, and will incorporate ERTMS.

Prioritizing interoperability on the high-speed rail network will help to channel investment by the countries concerned towards technologies that ensure interoperability, progressively reducing the additional costs imposed by gauge differences.

By significantly enhancing their rail links, interoperability will improve communications between Spain and Portugal and the rest of Europe. On the routes served by the high-speed network, it should help rail to win market shares from both air and road transport on congested routes. Significant benefits will be seen in travel times, and in freeing up significant freight-transport capacity on conventional lines.

#### Bottleneck sections

The sections of this axis complement those of the 'high-speed south-western railway axis' (PP3), where several new high-speed lines are already operating at European gauge: Madrid-Valladolid, and Madrid-Zaragoza-Lérida –Barcelona.

The sections Madrid-Sevilla, Córdoba-Málaga and Zaragoza-Huesca are already operational. A number of other sections are under construction: Sevilla-Cádiz, Antequera-Granada, Madrid-Jaén, Zaragoza-Teruel, Madrid-Albacete-Valencia/Alicante, Alicante-Almeria, the Mediterranean Corridor, Valladolid-Palencia-León-Asturias and Valladolid-Zamora-Ourense-Santiago.

Within the framework of the multi-annual work-programme (2007-2013), the co-financing of € 22.86 million, for the works for the interconnection between the Mediterranean Corridor and the PP3 is foreseen.

On the Portuguese side of the cross-border section Vigo-Porto, the first preparatory works have started (upgrading between Porto and Braga) or will soon start (new line between Braga and Ponte de Lima).

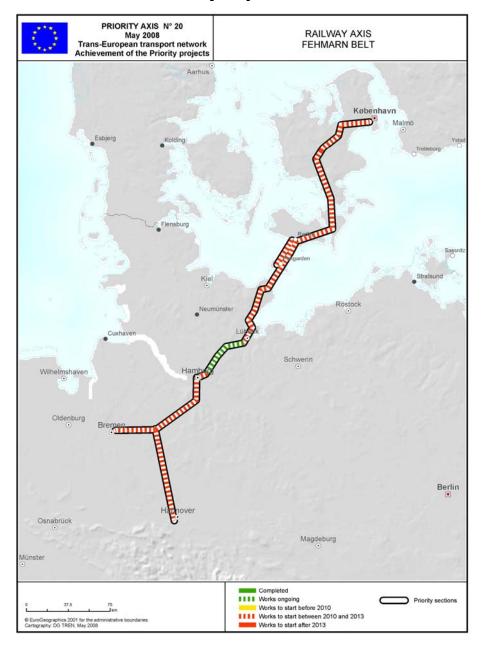
### Cross-border sections

Preparatory studies for the cross-border section Ponte de Lima-Vigo are under way. The first phase of works is expected to start in 2010 and the line is scheduled to be fully operational in 2013.

The GEIE AVEP is responsible for the preparation of the common studies for both sides of the International section. These studies have already started.

Within the framework of the multi-annual work-programme (2007-2013), the co-financing of € 244,14 million (studies and works) for this section (ca. 25.51 % of total eligible costs) is foreseen.

35



			Inves	tment befo	ore 2007 in M E	UR		Inve	stment 2007	'-2013 in M EU	R			
	Estimated	Total cost			Of which		Degree of			Of which		Degree of	laura atus a ust	Investment after 2013
MS involved	completion date	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	as % of total investment
DE, DK	2018	7,930.70	36.72	32.42	0.00	0.00	0.5%	2.680.50	374.29	0.00	0.00	34.3%	5,213.48	65.7%

Length of the PP in km	Total		Works ongoing	Works completed	Works to be started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
(Rail)	533	in km	47	0	486	OI WIIICII.	0	486	0
(INAII)		in %	8,8%	0,0%	91,2%		0,0%	91,2%	0,0%

Length of the PP in km	Total		Works ongoing	Works completed	Works to be started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
(Road)	19	in km			19	or willer.		19	
(Roau)		in %	0,0%	0,0%	100,0%		0,0%	100,0%	0,0%

Completed: 0 km

#### Railway axis Fehmarn belt

This axis is an extension of the Øresund crossing (PP11) and the Nordic triangle road and rail links (PP12) and is a key component in the main north–south route connecting central Europe and the Nordic countries. It will involve the construction of a bridge or a tunnel in order to form a fixed road and rail link, spanning the 19 km-wide Fehmarn Strait between Germany and Denmark as well as improvements to related rail links in Denmark and Germany.

The project will provide an alternative for the ferry link between Rødby (Denmark) and Puttgarden on the Fehmarn Island in Germany. It is expected to stimulate economic development in the Baltic Sea regions of Denmark and Germany, especially in the cross-border areas close to the link. Once completed, it will attract passenger and freight traffic estimated at 3.3 million vehicles and 30-35 thousand trains a year, helping to relieve congestion on the Great Belt route across Denmark, in particular on the rail network.

#### Cross border sections

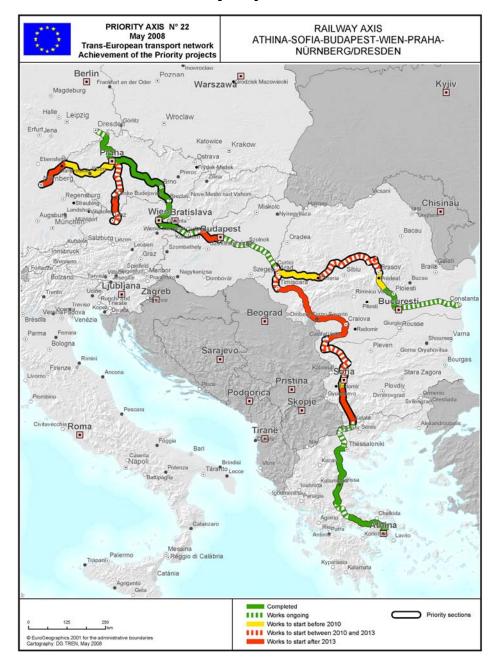
A Memorandum of Understanding on the fixed link between Rødby and Puttgarden was signed by the Danish Minister for Transport and the German Minister for Transport on 29 June 2007. Negotiations on a Treaty based on this Memorandum are at an advanced stage. Studies concerning the navigational conditions in the Fehmarn Belt are under way and the tendering of the necessary environmental impact assessments is being prepared.

Within the framework of the 2007-2013multi-annual work-programme, the co-financing of € 338,9 million (studies and works) for the fixed road and rail link of the Fehmarn Belt (ca. 26,60 % of total eligible costs) is foreseen.

# Other sections

As far as the railway section in Denmark (Copenhagen - Rødby) is concerned, the implementation has progressed to different degrees at different sub-sections. On a small part of the section east of Ringsted the upgrading works started earlier this year. On a 6 kilometre sub-section south west of the Copenhagen Central Station, the upgrading works also started recently. On the remainder of the railway section Copenhagen-Ringsted, substantial capacity increases are required and an environmental impact assessment is currently being carried out in order to provide the basis for a decision by autumn 2009 on one of the two alternatives: either a new line between Copenhagen and Ringsted via Køge or the construction of a 5th track on the sub-section Hvidovre - Høje Taastrup.

On the German side, considerable investments will be needed to make the sections Hamburg-Lübeck (double tracked and non-electrified) and Lübeck-Puttgarden (single track and non-electrified) fully operational.



			Inves	tment befo	ore 2007 in M	EUR		Inve	stment 2007	-2013 in M EUF	₹			
	Estimated				Of which		Degree of			Of which		Degree of		Investment after
MS involved	completion date	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	2013 as % of total investment
AT, BG, CZ, DE, GR, HU, RO	2020	12,641.80	465.36	12.64	190.55	372.80	3.7%	5,618.52	22.25	2,734.80	413.02	48.1%	6,557.92	51.9%

				Works	Works to be				
Length of	Total		Works ongoing	completed	started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	3812	in km	748	1032	2032	oi wilicii.	421	802	809
		in %	19,6%	27,1%	53,3%		11,0%	21,0%	21,2%

Completed: 1032 km

#### Railway axis Athina-Sofia-Budapest-Wien-Praha-Nürnberg/Dresden

The project links the eastern Member States of the enlarged EU through a major railway axis. Completing them will improve connectivity between all the networks on the basis of common standards. This axis is the only connection from south-eastern Europe (and Greece) to the heart of the EU. Progress to date is fairly uneven. Some sections have been already completed (in Germany, Czech Republic, Hungary and Greece), whilst works on other sections will start only after 2013.

#### Cross-border sections

Nürnberg-Prag-Brno: The Czech Republic is making good progress on its sections which are intended to increase average line speeds to 160 kph. The section Prague-Nürnberg involves some challenging geological conditions – work is already in preparation. Regarding the section from Prague to Brno, this section can be considered complete – there remains only a few junction modernisation works. Germany has not planned yet any works of upgrading on this existing railway line between Nürnberg and Czech border in the period up to 2013. Linz-Prague: On the Czech side preparations are at an early stage. The sub-section Prague-Ceske Budejowice will start between 2010 and 2013. Regarding the cross border section Ceske Budejowice-Linz, each country received TEN-T support in 2005 of € 1 million for initial studies with the construction phase on both sides of the border due to start only after 2013.

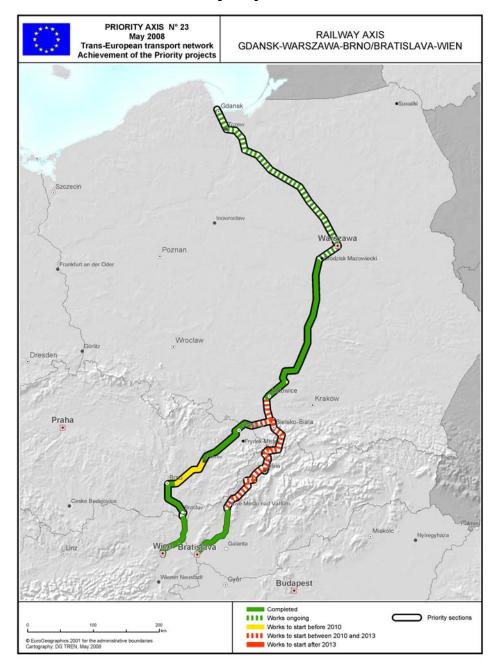
Wien-Budapest section: The section on the Austrian side is completed. Between the Hungarian/Austrian border and Komárom the works are ongoing, in the remaining section until Budapest the works will start after 2013. In the current programming period preparations will commence and will be supported by a TEN-T grant of € 1, 25 million for the second part of the Hungarian section. The bridge in Vidin/Calafat on the RO/BG border: The Danube road and rail bridge in Vidin/Calafat, between Bulgaria and Romania, is not only a key project for Bulgaria but also for this axis. The contract for the bridge was signed in 2007. It is expected to be completed by 2010.

# **Bottlenecks**

Curtici-Brasov-Predeal: The main Romanian branch – Curtici-Brasov-Bucharest-Constanta – is electrified twintrack, in good condition but with relatively low speeds. Works between Curtici and Predeal will start before 2013, but are unlikely to be completed before 2020. Vidin-Sofia-Kulata: The 280 km Sofia-Vidin section is electrified, but two thirds is single track with speeds below 100 km/h. A feasibility study for upgrading this section has been carried out with ISPA financial assistance. Bulgaria intends to implement a relatively small part of the section by 2013. The sub-section Sofia-Radomir (Southern of Sofia) will be completed by 2013 as well, but the remainder (Vidin-Sofia-Kulata) will not be completed before 2020.Budapest-Curtici, Predeal-Campina, Bucharest-Constanta, Curtici-Arad-Calafat – non-priority sections of the axis 22: Between Budapest and the Hungarian/Romanian border the works are on-going and will be completed in the 2007-2013 programming period. Works will be completed by 2010 on the Romanian sections Predial-Campina. Romania will not invest heavily in the line Arad-Calafat until after 2013. Before then, only a small section of 3, 3 km leading to the bridge in Calafat will be built.

# Other sections

Kulata-Athina, Dresden-Praha, Brno-Vienna and Campina Bucharest - non-priority sections of the axis: The sections Thessaloniki–Domokos and Tithoréa-Athens have been operational since 2008. The constructions along the two sections between Thessaloniki-Kulata and between Tithoréa-Domokos will be completed by 2015. The sections Dresden-Praha and Brno-Vienna are already operational, though there will be some additional junction improvement work at Breclav in the current programming period. Agreements between Germany, the Czech Republic and Austria, for upgrading to higher speeds and the use of tilting trains, will lead to reductions in journey times: for Berlin–Prague to 3 hours and Prague–Vienna to 3.5 hours. The 92 km long section north of Bucharest is completed, the rehabilitation works ended in 2004.



			Inves	ment befo	re 2007 in M E	:UR		Inve	stment 20	07-2013 in M E	UR			
	Estimated Total cos				Of which		Degree of			Of which		Degree of		Investment after 2013
MS involved	completion date	in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment	as % of total investment
CZ, PL, SK	2017	6,159.17	1,384.42	9.60	446.66	280.00	22.5%	3,296.22	14.17	2,301.80	0.00	76.0%	1,478.53	24.0%

Length of			Works	Works	Works to be				
the PP in	Total		ongoing	completed	started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
km	1289	in km	341	608	340	OI WIIICII.	63	277	0
MII		in %	26,5%	47,2%	26,4%		4,9%	21,5%	0,0%

Completed: 608 km

## Railway axis Gdansk - Warszawa - Brno / Bratislava - Wien

Priority Project n°23 consists of the modernisation of the two-branch railway axis between Gdansk (PL) and Brno (CZ) / Nove Mesto and Vahom (SK). This is an important north-south corridor in central-Europe with significant traffic both for freight and passengers. Its western branch passes through Brno, the second city of the Czech Republic on its way to Vienna, while its eastern branch passes through Zilina, a city of growing importance regarding automotive production in Slovakia, to the country's capital Bratislava. The works will reinforce the attractiveness of rail, enabling a modal shift from road to rail and increasing therefore its market share. The project also includes the construction of an access link to the port of Gdansk.

The modernisation of the line is due to be completed by 2015. The section Grodzisk Mazowiecki and Katowice is already in service at a speed up to 200 km/h. It is reported to be the most efficient railway line in the country. Further investments are nonetheless planned to increase the speed up to 250 km/h at a later stage though the PP only intends at this stage to achieve an average speed of 160 km/h for passenger service and 120 km/h for freight.

The section Gdansk - Warsawa is currently under construction and works are well progressing. Poland intends now to proceed with the modernisation of the remaining 200 km of track and to upgrade power supply stations and the traffic controlling system (including ERTMS on the whole section Warszawa – Gdynia). This should enable a speed up to 200 km/h for the passenger service (160 km/h on average commercial service) and 120 km/h for freight. The works on the access of Gdansk port have started.

# Cross-border sections

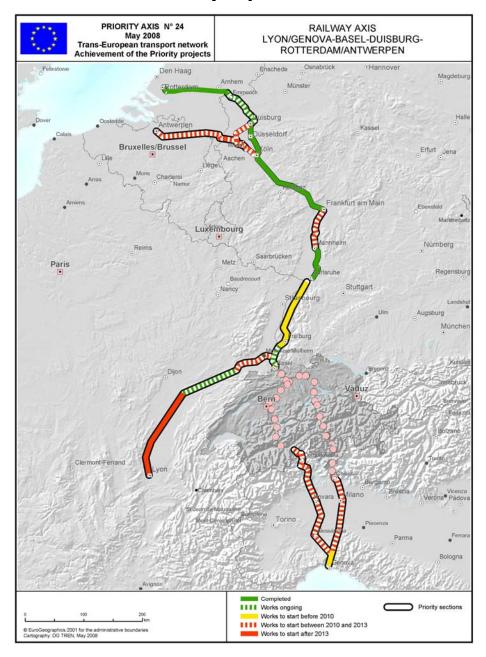
Cross-border sections in Poland are due to be completed by 2015. A first stage has already been done in order to overcome major bottlenecks in the cross-border section from Biesko – Biela to both the Czech Republic and the Slovakian border. Further investments are planned after 2010 in order to make the connections fully interoperable and to increase speed.

Works in the territory of the Czech Republic are already complete between Prerov and the PL border, and between Brno-AUS border. Works on the remaining section Brno-Prerov are due to commence around 2011 using financial support from the Cohesion Fund.

In Slovakia the section Bratislava-Nove Mesto and Vahom is now complete and activity will continue in this programming period with the works up to the Polish border. The final elements are due to complete in 2016.

#### Other issues

PKP (the infrastructure manager in Poland) is said to be facing difficulties in the allocation of EU funds and the running of works. This could significantly hinder the progress of PP23.



		Inves	tment befo	ore 2007 in M I	UR		Inve	stment 200	7-2013 in M E	JR			
Estimated Total cost in			Of which		Degree of			Of which		Degree of		Investment after	
	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	2013 as % of total investment

				Works	Works to be				
Length of	Total		Works ongoing	completed	started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	1688	in km	240	395	1053	oi wilicii.	156	733	164
		in %	14,2%	23,4%	62,4%		9,2%	43,4%	9,7%

Completed: 395 km



#### Railway axis Lyon/Genova-Basel-Duisburg-Rotterdam/Antwerpen

The priority project (PP24) is an important north-south transport axis linking the major ports of Rotterdam and Antwerp with Genoa passing through one of the most industrialised and densely populated areas in Europe. Therefore, the railway line is one of the most important rail freight lines in Europe. It carries today some 22.043 million ton-km per year and this is estimated to double by 2020<sup>1</sup>. It covers the following countries: Italy, France, Germany, Belgium and the Netherlands and passes through Switzerland.

## Alpine crossing

PP24 is the main railway axis crossing the Alps through Switzerland i.e. Gotthard and Lötschberg/Simplon tunnels. Sections in Germany and in Italy leading to Switzerland and the Alpine tunnels are crucial for realising the transport potential of this axis and for delivering a modal transfer from road to rail. On both sides of Switzerland, the access routes are still to be realised. These include important sections in Germany and Italy, which also link together logistic centres north and south of the Alps (e.g. Karlsruhe, Milano and Novara). The Lötschberg tunnel has been in service since December 2007.

## Genoa-Rotterdam

In Italy PP24 includes the upgrading and construction of the railway lines from the port of Genoa to the Swiss border both in Domodossola and in Chiasso passing either through Novara or Milano. The project is divided into several smaller projects and some have been completed and others are either ongoing or planned. Overall the planned works in Italy are very extensive and expensive.

In Germany PP24 includes the upgrading and construction of new lines on sections Karlsruhe-Basel, Frankfurt-Mannheim and Duisburg-Emmerich. The section Karlsruhe-Basel is divided into 6 smaller sections of which one is already completed. The Katzenbergtunnel section is ongoing and others are planned. Completion of the whole Karlsruhe-Basel sections is foreseen for 2020. The Frankfurt-Mannheim project is currently under preparation and works are planned for 2010-2015. Capacity improvement on the existing line Duisburg-Emmerich has been completed and the construction of a 3<sup>rd</sup> track is planned to start in 2010.

PP24 links to another priority project "the Betuwe line", which has recently been completed in the Netherlands to provide access between the port of Rotterdam and the German rail network.

## Other sections

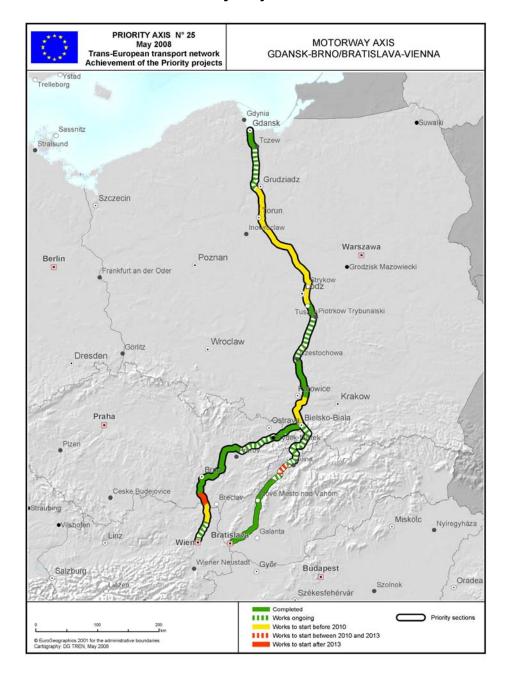
In France PP24 covers the construction of the eastern and southern sections of the high-speed railway line "TGV Rhin-Rhône" linking Lyon-Dijon to Mulhouse. The first phase of the eastern section of the "TGV Rhin-Rhône" is ongoing and due to be completed in 2011, with works on the second phase due to start in 2010. The southern section of the "TGV Rhin-Rhône" is currently in the study phase and it is planned to be in operation in 2020.

PP24 also includes the "Iron Rhine" project between Belgium and the Netherlands, which will improve connections from the Antwerp port to the German rail network. However as the project brings together the three countries, progress depends on reaching an international agreement.

The Rotterdam-Genoa railway axis is also being developed as ERTMS corridor A. It is expected that the infrastructure investments, combined with the implementation of ERTMS and harmonisation of operational procedures, will bring significant benefits in terms of capacity increases, reliability improvements and transport time and cost savings along the railway axis.

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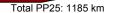
<sup>&</sup>lt;sup>1</sup> European Rail Infrastructure Master plan (ERIM)



			Invest	ment befo	re 2007 in M E	UR		Inve	stment 200	7-2013 in M El	JR			
	Estimated	Total contin			Of which		Degree of			Of which		Degree of	I	Investment after
MS involved	completion date	Total cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Investment after 2013	2013 as % of total investment
AT, CZ, PL, SK	2017	6,845.96	1,063.50	22.41	84.97	826.00	15.5%	5,782.46	5.01	2,019.88	293.15	100.0%	0.00	0.0%

				Works	Works to be				
Length of	Total		Works ongoing	completed	started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	1185	in km	396	434	355	oi which:	310	26	19
			33,4%	36,6%	30,0%		26,2%	2,2%	1,6%

Completed: 434 km



# Motorway axis Gdansk - Brno / Bratislava - Vienna

Priority Project n°25 is the construction of a motorway linking Gdansk (PL) to the Czech Republic and Slovakia. Works are due to be completed in the current 2007-2013 period. However, numerous environmentally sensitive areas are impacted by the project, which are likely to slow down its progress.

In Poland the works on motorway A1 (Gdańsk – Katowiçe) are due to be completed by 2012. This is urgent because the infrastructure is needed for the "Euro 2012" football championships.

Some stretches of the road are already in service: Gdansk – Tcszew, Tuszyn – Piotrkow Trybulnaski and Czsetochowa – Katowice. Works are on going on the rest of the axis with the exception of sections Grudziaz – Tuszyn and Katowice – Biesko Biala where works are due to start before 2010.

#### Cross-border sections

South of Katowice, the completion of PP25 is a second priority for Poland behind the conclusion of works on the remainder of the A1 motorway (which from this point does not form part of the PP).

The PP25 cross-border section from Ostrava (PL) to the Czech border is already completed. The cross-border section from Ostrava to the Slovak border is currently under construction.

In the Czech Republic, around 20km of route from the Polish border is already complete, with preparatory works ongoing or complete in the other sections of route as far as Brno. The route south of Brno to Pohorelice is complete, but the remaining section from Poherelice to the Austrian border is in an environmentally sensitive area and associated procedures are likely to mean that construction is unlikely to start before 2010.

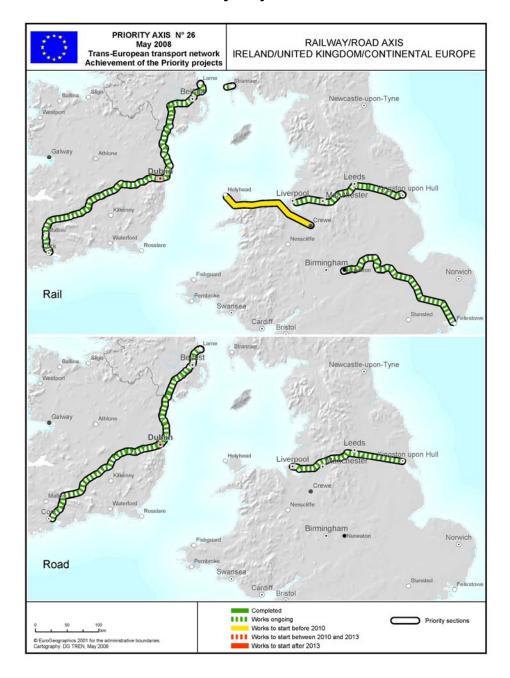
In Austria the Southern part of the A 5 motorway (Vienna – Schrick) is under construction since 2007 and is due to be completed in 2010. The Northern part of the A 5 motorway (Schrick – Czech border) is in the planning stage. Start of works for the Northern part is envisaged for 2010 and completion is intended for 2013.

In the Slovak Republic the authorities are looking to complete the works between Zilina and the Polish border in the current programming period.

# Public-Private Partnership

In Poland various section are planned to be built using PPP schemes: Gdańsk- Świecie (A1) and Łódź – Katowice (A1). Furthermore, the section Strykow-Pyrzowice (A1) may receive support from the Loan Guarantee instrument for TEN-Transport's projects (LGTT), funded under the TEN-T budget and operated by the European Investment Bank.

In Austria the Southern part of the A 5 motorway (Vienna – Schrick), which is already under construction, is implemented as a PPP project.



				Invest	ment bef	ore 2007 in N	1 EUR		Inve	stment 20	07-2013 in M	EUR				1
	MS Estimated Total		Total			Of which		Degree of			Of which		Degree of		Investment	
MS	completion date	cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	after 2013	after 2013 as % of total investment		
I	RL, UK	2020	6,242.82	2,356.39	10.29	0.00	0.00	37.7%	2,473.43	10.00	0.00	0.00	77.4%	1,413.01	22.6%	

Length of the PP in km (Rail)	Total 1089	in km in %	Works ongoing 932 85,6%	Works completed 0 0,0%	Works to be started 157 14,4%	of which:	Start before 2010 157 14,4%	Start 2010 - 2013 0 0,0%	Start after 2013 0 0,0%
Length of the PP in km (Road)	Total 633	in km	Works ongoing 633	Works completed	Works to be started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013

Completed: 0 km

#### Railway/road axis Ireland/United Kingdom/continental Europe

This axis builds on improvements to the main north-south rail line in Ireland (PP9) and to the Ireland-United Kingdom-Benelux road links (PP13). Both have helped to considerably reduce passenger and freight journey times between Ireland, the United Kingdom and the European mainland. But further improvements in capacity in both rail and road are now required to cope with the development in traffic, and to further improve links with the rest of the EU.

Investment is needed to complete the upgrading of the major inter-urban motorways north and south from Dublin, linking the three principal cities on the island, and to set up a driver information system to improve traffic management. In the United Kingdom, the major projects relate to modernising the Felixstowe-Nuneaton and Crewe-Holyhead railway lines. These links to two major ports will almost triple the current capacity of west-east freight movements across the United Kingdom. These two lines intersect the United Kingdom's main north-south line, the west coast main line (PP14).

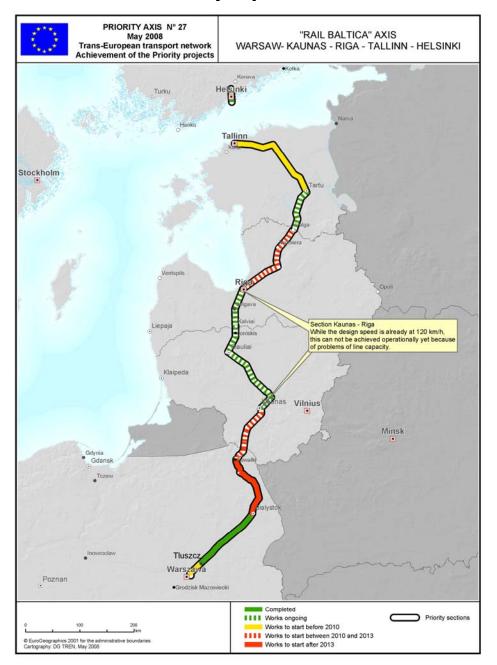
# **UK/IE** bottleneck sections

In the UK work on the road axis is being taken forward between now and 2013 to remove key bottlenecks on the M62 which is the main transit route across Northern England. On the rail side, significant improvements on the Felixstowe to Nuneaton rail line have already been achieved on the spur via London during the first phase of the project (which received financial assistance from the TEN-T budget), whilst in Northern Ireland works have started on building a new station at Newry. Further works being considered from 2009 in England include a cost effective solution to the bottleneck at Stafford, possible remodelling/resignalling around Crewe and works at Hull Docks. Improvements are also planned for Peterborough Station. In Northern Ireland significant investments are planned for track at Lisburn and between Ballymena to Coleraine.

Between 2004-2006, works in Ireland concentrated on track renewal. In addition to safety improvements, this investment has also facilitated improved journey times, additional services and passenger comfort by providing a platform for further investment in rolling stock for example. It has also enabled hourly services to be introduced on the Dublin/Cork route for the first time. Works at Heuston Station have allowed for more efficient handling of trains as well as new platforms, a new signalling system, new track work and much improved customer facilities.

Between 2007–2010, works will focus on the Kildare Route where their completion will allow for more frequent running of commuter, regional and intercity trains and enable faster inter-city services from Cork to Dublin to overtake slower commuter services. Track Renewal and safety-related work is also planned to deliver further improved journey times, safety levels, reliability and performance, which will in turn facilitate increased frequency and reduced journey times of the intercity services.

Within the framework of the multi-annual work-programme (2007-2013), the co-financing of 10 million € for the Dublin Interconnector Tunnel studies is foreseen.



			Inves	tment bef	ore 2007 in N	/I EUR		Inve	estment 20	007-2013 in M I	EUR			
ме	Estimated	Total			Of which		Degree of			Of which		Degree of	lassa atau a mé	Investment after 2013 as
MS involved	completion date	cost in M EUR	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	after 2013	% of total investment
EE, LT, LV, PL	2020	3,198.19	50.00	0.00	21.36	0.00	1.6%	1,556.19	124.04	780.29	0.00	50.2%	1,592.00	49.8%

				Works	Works to be				
Length of	Total		Works ongoing	completed	started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	1142	in km	374	135	633	oi wilicii.	255	258	120
		in %	32,7%	11,8%	55,4%		22,3%	22,6%	10,5%

Completed: 135 km



#### "Rail Baltica" axis: Warsaw-Kaunas-Riga-Tallinn-Helsinki

"Rail Baltica" will link four of the central and eastern European states that joined the EU in 2004 – Estonia, Latvia, Lithuania and Poland – and can be linked by rail ferry to another EU member, Finland. The project will provide the only rail connection between the Baltic countries and Poland and will act as a crucial link between the Baltic region and other EU countries such as Germany to the west and other countries in Central and Eastern Europe to the south. "Rail Baltica" will also provide an interface between the European standard gauge track used throughout most of Europe, including Poland and the broad gauge track used in the Baltic countries and neighbouring countries, most notably Russia, "Rail Baltica" can also offer an important trade route between the EU and Russia. A feasibility study revealed that the project would benefit principally rail freight as the population of the three Baltic countries is low (less than 8 million total).

Regular reporting has been made available to the European Parliament, the Council and the wider public through the annual activity reports of the European Coordinator, Mr. Pavel Telička. Six specific projects to help realise "Rail Baltica" have been accepted for funding under the TEN-T programme for the period 2007-2013 - the ultimate aim being to provide by 2013 a rail link with an operating speed of 120kph. The eligible cost of the project (not including Poland) will be € 422.8 million of which € 125.8 million will come from the TEN-T (25.4%).

#### Cross-border sections

Bilateral agreements have been signed for each of the three cross-border sections which will be developed during the current programming period.

A bilateral treaty was signed in March 2007 for the Poland-Lithuania cross- border section from Suwałki to Mariampolė. Works will start on the Lithuanian side in 2010 and will continue until 2013. On the Polish side works are estimated to start after 2011.

A bilateral treaty was signed in July 2007 for the Lithuanian-Latvian cross-border section from Siauliai to Jelgava. On the Lithuanian side works should start in April 2011 and be completed in December 2012. On the Latvian side the works will start in May 2009.

A bilateral treaty was signed in July 2007 for the Latvian-Estonian cross border section from Valmiera to Tartu. Works should start on the Latvian section In June 2009 and be completed by the end of 2012. In Estonia work has already started on upgrading the line from the border to Tartu.

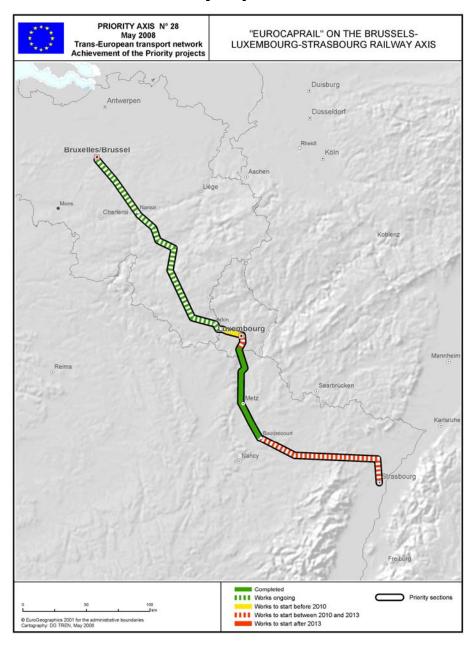
#### Other sections

Works on the Latvian section Riga-Valmiera will receive TEN-T financial support, and should start in October 2010 and last until 2013. The reconstruction works on Estonian section Tallinn-Tapa will start in 2009 and last until 2011 and will be financed from the EU Cohesion Fund and by Estonian Railways.

#### Constraints

The Coordinator understands that Poland wishes to modify the route between Białystok and Suwatki via Ełk.

The fact that Poland (which will use only national and cohesion fund finance) has indicated that it cannot start work until after the route has been redefined, means that the completion of the upgrading of the whole route is now estimated to be carried out by 2020. However Poland is a party to the agreement made between the Coordinator and all four partner countries that the line will have an average operating speed of 120 km/hr by 2013, therefore Poland agrees that it will have to make best use of its existing infrastructure to allow this outcome. While the line from Warsaw to Białystok is satisfactory, Poland must make every effort to complete the border section by 2013.



MS involved	completion	I IN MI EUR I	Investment before 2007 in M EUR				Inve	estment 2007-2013 in M EUR						
				Of which		Degree of	Degree of		Of which				Investment after	
			Total	TEN-T budget	Structural / Cohesion	EIB	completion	invested	TEN-T budget	Structural / Cohesion	EIB	Degree of completion in 2013	Investment	2013 as % of total investment
BE, LUX	2013	1,183.19	18.76	9.46	0.00	0.00	1.6%	1,083.23	57.18	0.00	0.00	93.1%	81.20	6.9%

				Works	Works to be				
Length of	Total		Works ongoing	completed	started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	411	in km	188	83	140	OI WIIICII.	15	125	0
		in %	45,7%	20,2%	34,1%		3,6%	30,4%	0,0%

Completed: 83 km



#### "Eurocaprail" on the Brussels-Luxembourg-Strasbourg railway axis

The axis adds an important link to the European rail network. It will join existing infrastructure to improve north-south links through better connections between the North Sea and Italy, via Belgium, Luxembourg, eastern France and Switzerland. It will also improve connections between the EU's three main administrative centers.

The major international objective is to achieve travel times between Brussels and Luxembourg of one and a half hours and Brussels and Strasbourg of three hours in combination with the TGV-Est. In total, completing the project will represent a time saving of 2.5 million hours per year, of which more than 2 million would be accounted for by international traffic. It will increase the profitability and competitiveness of rail on the route, and relieve road traffic on the adjacent motorways. This will make a significant contribution to sustainable development and protecting the environment in areas of natural beauty such as the Ardennes.

Works will include linking the Brussels international airport axis and the Brussels-Antwerp-Amsterdam high-speed line (see PP2) via a new tunnel between Brussels Schuman and Josaphat. In Brussels, an additional twintrack line will be created between Brussels Schuman and the Brussels North-South junction for high-speed connections to London, France and the Dutch Randstad region. The construction of a new line between Bettembourg (Luxembourg) and links with the TGV-Est (see PP No 4) and the Paris-Stuttgart-Vienna-Bratislava line (see PP17) will provide high-speed connections to and from the south and east. The upgrades will also facilitate the daily commuting of some 30 000 Belgians from southern Wallonia to their work in Luxembourg.

#### Cross-border section Luxembourg-Metz-Baudrecourt

Works on this section were completed and it has been operational together with the line Paris-Baudrecourt (PP17) since 2007.

The 104 km Baudrecourt-Strasbourg section in France (see *PP4* and *PP17*) is currently at an advanced stage in planning. Studies are on going but works will depend on availability of funds.

## Other sections

In Belgium, works are on going. Part of it is pre- financed by the Walloon Region which signed at the end of 2006, a convention with the Belgian State. This pre-financing mechanism makes it possible to start works earlier than initially foreseen. However, as this is an operational line, the last phase of works (re-electrification) should not be completed before end of 2014. In Luxembourg, investment to upgrade the rail line between the capital city and the Belgian border is planned from 2009 to 2012, and could be extended into 2013. Funds totalling € 57million from the 2007-2013 TEN-T budget will be used to support this activity.



MS involved comple			Investment before 2007 in M EUR					Inves	Investment 2007-2013 in M EUR					Investment					
	Estimated	T.4.1 4		Of which			Degree of		Of which			Degree of		Investment					
	completion	Total cost in M EUR	in M EUR	in M EUR	Total cost in M EUR	Total cost	in M EUR	in M EUR	in M EUR	T∩tal	TEN-T budget	I-T Structural / EIB completion end 2006	completion end 2006	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	Unvestment
GR	2019	4,308.00	81.00	0.00	0.00	0.00	1.9%	4,227.00	37.00	0.00	0.00	100.0%	0.00	0.0%					

Length of	Total		Works ongoing	Works completed	Works to be started	of	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	606	in km	0	0	606	which:	0	202	404
		in %	0,0%	0,0%	100,0%		0,0%	33,3%	66,7%

Completed: 0 km

#### Railway axis of the Ionian/Adriatic intermodal corridor

These new rail links are founded on Greece's geographical position at the crossroads between Europe, Africa and Asia. The two interlinked routes will lead to huge increases in capacity for intermodal links between sea and rail transport, by connecting the major ports in Greece with each other, and with main rail routes to the rest of Europe. This axis will complete a major part of the missing railway infrastructure in northern Greece, allowing the operation of the so-called Egnatia railway axis. Connections between the rail networks of south-eastern Europe (Greece, the Former Yugoslav Republic of Macedonia, Bulgaria and Turkey) will become much easier and more efficient.

These routes will significantly increase the capacity of the rail network for efficiently accommodating intra-EU and international transport flows towards central European markets, which are currently served by road and long-distance maritime transport. Improved intermodal operation along the Adriatic- Ionian corridor will create significant time and cost savings for cargo transit as well as encouraging the use of sustainable modes of transport.

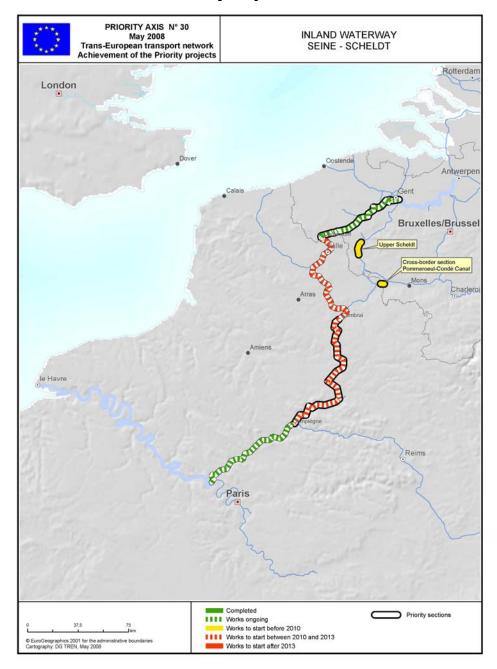
The first rail line, which will connect with existing infrastructure, will create a high quality and environmentally friendly "land bridge", between the port of Igoumenitsa (on the Adriatic Sea) and Thessaloniki (end point of the rail pan-European corridor X), Volos (motorway of the sea towards Asia and the Middle East), Alexandroupoli (end point of pan-European corridor IX) and Piraeus (the major hub of the Eastern Mediterranean). Technical studies for this new rail line have been finalised and the beginning of works is envisaged for 2010.

The second line will connect the four Greek ports of the Adriatic-Ionian corridor (Patras, Igoumenitsa, Kalamata and Astakos).

<u>The section Ioannina - Antirio</u> involves a new rail line. For this section the technical studies will be finalised before 2012 and financed with support from the TEN programme 2007-2013. The beginning of works is envisaged for 2013.

<u>The section Rio - Kalamata involves</u> the rehabilitation of an existing rail line (metric spacing). For this section the technical studies, also to be financed with TEN-T support, will be finalised before 2013. The beginning of works is envisaged for 2013.

For information, the Operational Programme "Improving Accessibility" produced within the framework of the National Reference Strategic framework for Greece does not foresee financial support for this TEN-T project.



			Investment before 2007 in M EUR					Investment 2007-2013 in M EUR						
Estimated		Total cost in M EUR			Of which		Degree of		Of which		Degree of		Investment	
MS completion date	cost in		Total invested	TEN-T budget	Structural / Cohesion	EIB	completion	Total invested	TEN-T budget	Structural / Cohesion	EIB	completion in 2013	IInvestment	after 2013 as % of total investment
BE, FR	2016	4,422.41	21.31	21.06	0.00	0.00	0.5%	4,097.70	420.19	0.00	0.00	93.1%	303.40	6.9%

			Works	Works	Works to be				
Length of	Total		ongoing	completed	started	of which:	Start before 2010	Start 2010 - 2013	Start after 2013
the PP in km	408	in km	174		234	or which:	0	234	
		in %	42,6%	0,0%	57,4%	1	0,0%	57,4%	0,0%

Completed: 0 km

## **Inland Waterway Seine-Scheldt**

The Seine-Scheldt Project represents the second major waterway link in Europe after the Main Canal that connected in 1992 the Rhine and Danube rivers. The investments for both projects are comparable in terms of technical and financial challenges. Due to the growing importance of inland navigation, the Commission has nominated Mrs. Karla Peijs European Coordinator for Inland Waterways Transport, both for Priority Project 30 and for Priority Project 18, Rhine/Meuse-Main-Danube.

€ 420 million have been allocated to this project for studies and construction works from the Trans European Transport Network (TEN-T) budget for the 2007-2013 programming period.

#### Cross-border sections

The restoration of the Canal Pommeroeul-Condé in Wallonia and the border Lys are the cross border section of this project. These two realisations will allow the connection from the French part of the canal to the north towards Ghent and to the eastern part of the network towards Liège.

# **Bottlenecks**

The construction of the canal Seine-Scheldt will eventually interconnect the French and Belgian inland waterways network and pave the way to the achievement of an eagerly expected single European inland waterways network towards the Netherlands and the German networks.

The removal of the Pont des Trous bottleneck in Wallonia and the improvement of navigation regions will ensure the creation of a network capable of accommodating barges with over 3000 tons of freight.

# Other sections

The improvement of navigation conditions between Deulemont and Ghent, including the ring around Ghent, forms part of the activities to realise the full Priority Project corridor from the Seine and the canal that connects to the Dutch Terneuzen port.

The Canal Seine-Nord in France goes far beyond a mere infrastructure project to boost transport capacity as it aims to integrate several land based policies to benefit regional development and sustainability. The construction industry will be boosted by public and private spending of more than 4 billion until 2014.

The overall completion is planned for 2016 and will sustain a capacity for barges up to Class Vb of the European Classification.

# Statistics on Transport Infrastructure and on TEN-T Funding and Investments

# 1. Funding sources

The following charts provide an analysis of the Community funds contribution to the TEN financing in each Member State for the period 2007-2013¹ as well as the financial effort that has to be undertaken in the mentioned period in terms of the investment on TEN-T projects and the part that it represents in the GDP.

Charts 1 and 2 provide an analysis of the time evolution of the financial sources.

Chart 1: Financing of TEN-T 1993-2006

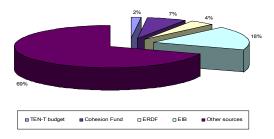
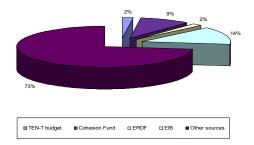
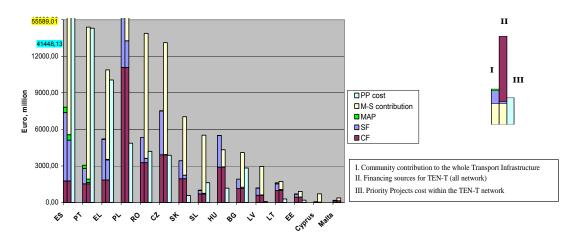


Chart 2: Financing of TEN-T 2007-2013



Charts 3 and 4 show the total contribution by Member States to the transport infrastructure sector (2007-2013) of the cohesion policy funds (CF+SF) and of TEN-T funds, the share of these funds in the financing of the TEN-T, as well as the cost of the priority projects<sup>2</sup> for the respective Member States.

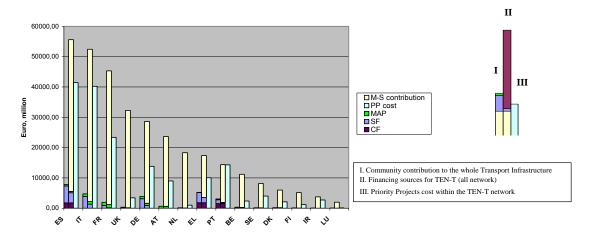
Chart 3: Financing of the transport infrastructure projects (Cohesion countries)



<sup>&</sup>lt;sup>1</sup>Source of the 2007-2013 TEN-T investment data: Implementation report on the TEN-T guidelines for the period 2004-2005 (TREN/2006/ADM/S07.60719/162/B1).

<sup>&</sup>lt;sup>2</sup>The 2007-2013 TEN-T PP investment has been estimated by a simulation process.

Chart 4: Financing of the transport infrastructure projects (EU-15)



Charts 5 and 6 reflect the percentage of the Member States and Community contribution in the financing of the TEN-T projects in 2007-2013, as well as the share (%) of the priority projects cost in the total figure of the TEN-T projects.

Chart 5: Share of the Member States and Community contribution in the TEN-T financing and relative PP cost in the TEN-T implementation (Cohesion countries)

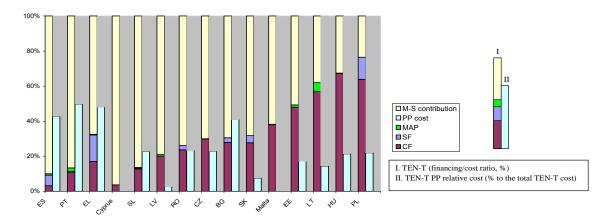


Chart 6: Share of the Member States and Community contribution in the TEN-T financing and relative PP cost in the TEN-T implementation (EU-15)

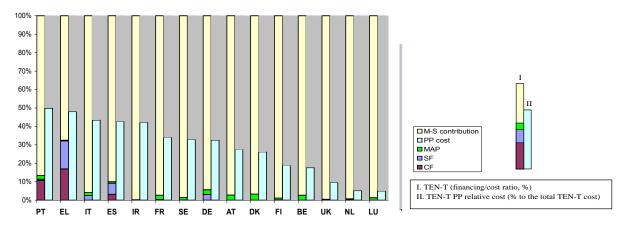
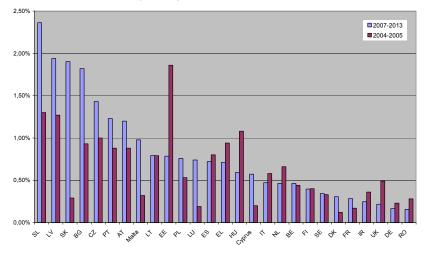


Chart 7 elaborates an estimation of the financial effort to be done in 2007-2013 by each Member State in terms of the share that the TEN-T projects cost represents in comparison with the national GDP. Such effort can be compared with the one made in the period 2004-2005.

Chart 7: Ratio TEN-T investment / GDP (EU-27)



# 2. TEN-T Multi-annual programme

Charts 8 to 12 present the results of projects selection in the framework of the multi-annual programming exercise carried out in 2007. Distribution of funding to different modes of transport, types of projects as well as the scale of support to individual Priority Projects are illustrated below.

Chart 8: MAP 2007-2013 Results of selection (in million EUR)

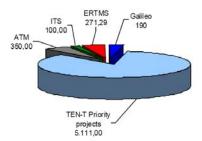


Chart 9: Multi-annual programming of TEN-T 2007-2013, breakdown per Priority Projects (in million EUR)

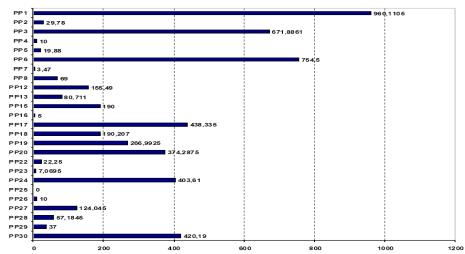


Chart 10: Multi-annual programming of TEN-T 2007-2013. Breakdown per mode of transport (in million EUR)

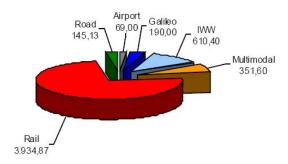


Chart 11: Multi-annual programming of TEN-T 2007-2013. Breakdown per category of project (in million EUR)

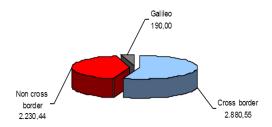
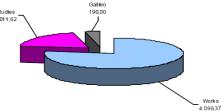


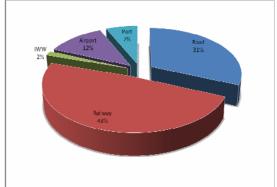
Chart 12: Multi-annual programming of TEN-T 2007-2013. Breakdown into works and studies funding (in million EUR)

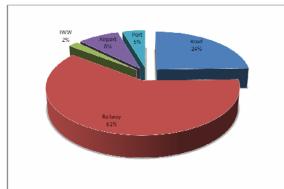


# 3. Modal distributions

Chart 13 shows the division of the overall investment in the TEN-T by mode of transport. The data was collected by external consultants in the process of preparation of the TEN-T Implementation Reports.

Chart 13: Modal segment of TEN-T Investments in EU-27 in 1996-2003 and 2004-2005





Charts 14 to 16 show the distribution of PP costs by transport mode.

Chart 14: Modal distribution of the total PP cost

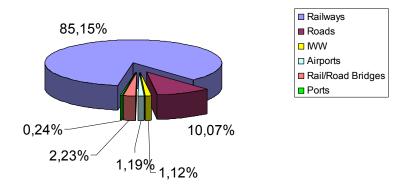


Chart 15: Modal distribution of the PP expenditure up to 2007

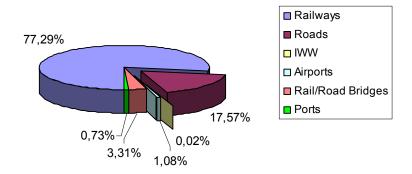
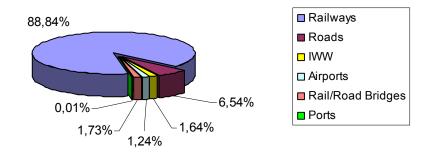


Chart 16: Modal distribution of the remaining PP investment after 2007



#### **KEY ISSUES**

# ON THE IMPLEMENTATION OF TEN-T PRIORITY PROJECTS Background & Questions for discussion at the Informal Transport Council of 6 May 2008

## 1. Introduction

Developing, connecting, better integrating and coordinating the development of European energy, transport and telecommunications infrastructures are ambitious objectives and are referred to in the Treaty<sup>2</sup> and the Guidelines for growth and jobs<sup>3</sup>.

The trans-European energy, transport and telecommunications networks are the lifeblood of our economies. If they don't perform, competitiveness suffers. Their development is vital to this Commission's agenda on growth and jobs, to realise the internal market and to strengthen economic and social cohesion. To this end, Community action should aim at promoting the interconnection and interoperability of national networks as well as access to these networks<sup>4</sup>.

The trans-European networks help to boost the EU's competitiveness. The sustainable use of resources is also an essential aspect of policy on the TENs since the priority projects give privileged status to those modes which are more environmentally friendly.

This discussion paper analyses briefly the state of play of the trans-European transport network (TEN-T), focuses thereafter on the main successes and obstacles to the implementation of the network, including specific examples and concludes by proposing a number of issues for discussion.

#### 2. THE TRANS-EUROPEAN TRANSPORT NETWORK

# 2.1. State of play May 2008

14 priority projects were identified by the 1994 Essen European Council and included in the 1st Decision of the European Parliament and of the Council on Community guidelines for the development of the TEN-T in 1996<sup>5</sup>. This list was extended in 2004 to take account of the accession of 10 and then 2 more new Member States to the EU. The TEN-T comprises 30 priority projects which should be completed by 2020.

Of these 30 priority projects, 18 are railway projects, 3 are mixed rail-road projects, 2 are inland waterways transport projects and one refers to motorways of the sea. High priority has therefore been given to the more environmentally friendly transport modes. A map outlining progress in implementation to date is attached at page 71. The Commission will also provide at the meeting of the Informal Council a detailed report outlining the progress of each of the Priority Projects.

Some of these large-scale projects have already been completed, e.g the Øresund fixed link (connecting Sweden and Denmark, completed in 2000), Malpensa airport (Italy, completed in 2001) and the Betuwe railway line (linking Rotterdam to the German border, completed in 2007). Others will be completed soon, like the PBKAL project (HST Paris-Brussels/Brussels-Cologne-Amsterdam-London, expected to be completed in 2009).

At the same time, important sections of other priority projects have also been realised during the past years. Only to mention a few of them: the section Nürnberg-Ingolstadt, part of PP 1, has been put into service in 2006; the first phase of the TGV East in France, part of PP 4 and 17, has been put into service in 2007; and the Madrid-Barcelona high-speed rail link was completed in March 2008. Many more are about to follow, for instance the high-speed line Milano-Bologna-Firenze which should be ready in 2009.

However, the completion dates for some of the other major projects have fallen behind the original timetables. It is very clear today, that significant parts of the 30 priority projects will not be realised until 2010, 2015 or even 2020. It will be difficult to meet the 2020 deadline for some of the most complex projects, such as the Alpine crossings, along with a number of other bottlenecks on the priority projects.

Aside the enormous complexity of these key projects, there are several reasons for which projects can be lagging behind schedule: (i) lack of financing and/or financial guarantees, (ii) lack of coordination, project preparation and planning, and (iii) regulatory constraints.

<sup>2</sup> Articles 154, 155 and 156 of the Treaty.

<sup>3</sup> Guidelines for growth and jobs (2005-2008) No 9, 10, 11 and 16.

<sup>4</sup> Article 154 of the Treaty.

<sup>5</sup> Decision 1692/96/EC, OJ L 228, 9.9.1996.

# 2.2. Financing

Implementation of the trans-European transport networks requires substantial amounts of funding. Based on the revised information from the Member States, the overall cost of the network is EUR 900 billion<sup>6</sup> and nearly EUR 500 billion still needs to be invested until 2020. Completion of the priority projects alone requires more than EUR 250 billion by 2020. A recent study commissioned by European Parliament<sup>7</sup> reached a similar conclusion.

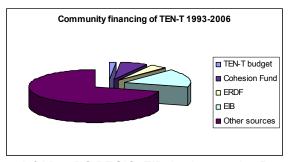
The Commission will provide at the meeting of the Informal Council a detailed and up-to-date table including all sources of financing (see table at page 6).

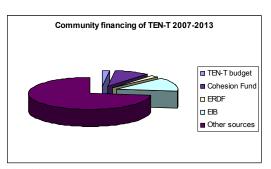
## 2.2.1. Public financing in the delivery of TEN-T projects

The Community contributes financially to the implementation of the TEN-T through (i) the TEN-T budget, (ii) Cohesion and Structural Funds and (iii) loans and guarantees of the European Investment Bank (EIB). The share of all these sources of the Community contribution in the overall investment in TEN-T was 29% for the period 1993-2006 and is expected to reach around 27 % for the period 2007-2013.

Table 1: Community financing of TEN-T

Community financing of TEN-T (EUR billion)										
	1993-1999	2000-2006	Share 93-06	2007-2013*	Share 07-13					
TEN-T budget	2.2	4.43	1.7%	8	2.1%					
Cohesion Fund**	8.3	17.33	6.6%	34.79	8.9%					
ERDF	7.5	8.6	4.1%	8.33	2.1%					
EIB***	26.5	44.9	18.3%	54	13.9%					
Other sources****	63.4	208	69.4%	283.88	73.0%					
Total	107.9	283.26		389****						





Source: InfoView DG REGIO, EIB, Implementation Report 2004-2005

## **TEN-T** budget

The TEN-T budget has been designed to facilitate preparation<sup>8</sup> and triggering investment in TEN-T projects. EUR 4.43 billion was allocated to the development of the TEN-T for the 2000-2006 programming period (1.7% of the total investment in TEN-T in that period). Grants awarded permitted co-funding of projects up to a maximum of 10% on national and a maximum of 20% on cross border sections. Under the financial framework 2007-2013 the TEN-T budget available for projects has increased to EUR 8.013 billion. The new TEN financing regulation<sup>9</sup> provides for Community co-funding rates of 50% for studies and maximum rates of 10 to 30% depending on the type of project<sup>10</sup>.

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<sup>\*</sup> Indicative figures

<sup>\*\*</sup> Including the Pre-Accession Structural Instrument (ISPA)

<sup>\*\*\*</sup> Between 1993-1999 loans for EU-15. From 2000 loans in EU-27

<sup>\*\*\*\*</sup> Public budgets and private financing

<sup>\*\*\*\*\*</sup> Total investment needs from Implementation Report 2004-2005

<sup>&</sup>lt;sup>6</sup> From 1996 to 2020

<sup>&</sup>lt;sup>7</sup> "Update on the costs of the TEN-T priority projects" – 17 March 2008

<sup>&</sup>lt;sup>8</sup> Important part of the budget and increased contribution rate is available to studies preparing the construction phase of projects.

OJ L 162/1, 22.6.2007

A maximum of 30% in case of cross border priority projects

The 2007 call for proposals proved that the needs of project promoters highly exceed TEN-T budget capacity. For the priority projects alone, the proposals received represented a total investment of more than EUR 55 billion, and a total requested Community contribution of EUR 11.5 billion. Consequently, the Community support for the 2007-2013 programming period had to be targeted very selectively and is focused on cross-border sections and bottlenecks only.

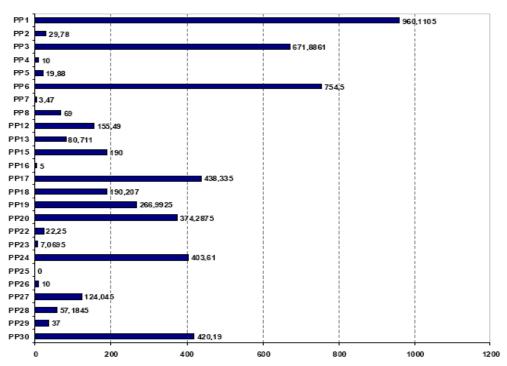
On 19 February 2008, the Commission adopted the Decision on the selection of projects for the TEN-T multiannual programme, following the consultation of the Member States in the TEN financing Committee, which unanimously endorsed the draft proposal, and the European Parliament which also welcomed the Commission proposal.

The proposed project selection in the field of priority projects contributes to the Commission's objective in terms of sustainable development. Three quarters (74.2%) of the funding goes to railway projects and another 11.5% are reserved for inland waterways. The support for road and air transport is more limited.

The goal of concentrating support on critical cross-border sections has been met: 56% of the available budget has been concentrated on works and studies concerning cross-border sections. The Community and the Member States have committed themselves to those projects that generate a significant network effect beyond the borders of the Member States directly concerned and will thus be of great benefit to the trans-European transport network. The non cross-border projects are also of undisputed European added value since they aim at removing bottlenecks on the TEN-T network. However, the support requested (more than € 11.5 billion) largely exceeded the available Community budget of € 5.1 billion.

The call resulted in the following distribution between the priority projects.

Chart 1: Multi-annual programming 2007-2013 – breakdown per priority projects



#### **Cohesion and Structural Funds**

The European Regional Development Fund (ERDF) and Cohesion Fund resources are important sources of Community assistance for co-funding of the TEN-T, providing in total for almost 11% of the total investment needs. The Cohesion fund which has two overall objectives, transport and environment, is a particularly strong driving force behind the TEN-T development on the territory of eligible Member States<sup>11</sup>. At least 50% of it is available to TEN-T projects (EUR 34.8 billion) in the period 2007-2013, and a maximum intervention rate of 85% of eligible project cost. In eligible countries, the Cohesion fund has already financed on average about 40% of TEN-T investment. A further EUR 8 billion is expected from the ERDF budget to support TEN-T infrastructure under the convergence objective.

For 2007-2013 the list of eligible countries include all new Member States, Portugal, Spain and Greece.

The following table shows the share of transport and TEN-T objectives in the total cohesion and structural funds allocation per Member State for the period 2007-2013 in EUR million:

Country	Total allocation SF/CF	Transport objectives	% of Transport in total allocation	TEN-T objectives	% TEN-T in total allocation
Austria	1.204	8	0,7%	3	0,2%
Belgium	2.064	54	2,6%	2	0,1%
Bulgaria	6.674	1.914	28,7%	1.250	18,7%
Cyprus	604	60	9,9%	26	4,4%
Czech					
Republic	26.303	7.515	28,6%	3.916	14,9%
Denmark	510	0	0,0%	0	0,0%
Estonia	3.403	682	20,0%	437	12,8%
Finland	1.596	34	2,1%	10	0,6%
France	13.449	927	6,9%	176	1,3%
Germany	25.489	3.149	12,4%	903	3,5%
Greece	20.210	5.184	25,6%	3.500	17,3%
Hungary	24.921	5.490	22,0%	2.904	11,7%
Ireland	751	26	3,5%	0	0,0%
Italy	27.845	3.889	14,0%	1.339	4,8%
Latvia	4.530	1.173	25,9%	595	13,1%
Lithuania	6.775	1.530	22,6%	980	14,5%
Luxembourg	50	0	0,0%	0	0,0%
Malta	840	184	21,9%	143	17,0%
Netherlands	1.660	40	2,4%	0	0,0%
Poland	65.222	22.677	34,8%	13.277	20,4%
Portugal	21.412	2.785	13,0%	1.642	7,7%
Romania	19.213	5.330	27,7%	3.622	18,9%
Slovakia	11.361	3.425	30,2%	2.240	19,7%
Slovenia	4.101	986	24,0%	728	17,7%
Spain	34.658	7.376	21,3%	5.117	14,8%
Sweden	1.626	63	3,9%	9	0,6%
UK	9.891	273	2,8%	75	0,8%
Cross border cooperation	7.858	1.038	13,2%	233	3,0%
Total	344.219	75.814		43.127	

Source: InfoView DG REGIO

# **European Investment Bank (EIB)**

The EIB is committed to supporting the Commission in the development of the TEN-T. It provides a significant contribution with over 18% of total TEN-T funding before 2007 and almost 14% estimated for 2007-2013 respectively. The EIB does not offer grants – rather, it can provide substantial loans and guarantees, often supported by a technical assistance element, both to private and public entities. The share of the Bank's involvement in TEN-T projects varies between countries and it is increasing its role in the TEN-T investment of New Member States.

# Member State funding

Despite the high contribution from the Community budget to the TEN-T development, the lion's share of the investment has to come from the national and regional budgets as well as through private financing.

Transport infrastructure delivery, has been traditionally considered governments' responsibility, such assets being financed largely by taxpayers and public borrowing, and to a certain extent by users. With the growing

need for mobility and accompanying standards relating to safety, security, interoperability or sustainability, the question arises whether increasing demand for transport infrastructures can still be addressed. It is commonly accepted that this huge increase, especially regarding freight, is a key problem in transport and logistics to be addressed in the near future.

In the 1980s, the Member States used to invest, on average, 1.5% of their GDP on transport infrastructure. Nowadays, only some New Member States reach this level whereas the EU 27 average went down to less than 1%. The EU27 investment in the TEN-T infrastructure is on average 0.45% A similar decline in public expenditure in transport infrastructure seems not to have happened in other parts of the world.

Charging for infrastructure use (based on the definition of a stable and predictable framework) is important from the perspective of the infrastructure financing. On the one hand the increased efficiency of infrastructure use makes infrastructure more profitable and attractive to investors. On the other hand, under a proper charging regime, based on the internalisation of external costs, user charges can provide a direct income source to service the private financing obligations and therefore facilitate setting up PPP schemes in delivering infrastructure.

Common rules for the charging of heavy goods vehicles with a maximum permissible gross laden weight of more than 3,5 tons have been set by Directive 1999/62/EC (modified by Directive 2006/38/EC); covering distance-related tolls and time-based user charges, to be established in a non-discriminatory, proportional and transparent way.

#### Internalisation of external costs and Cross-financing

The Commission will launch a package of measure in June 2008, under the title 'Greening of Transport', including a proposal for amending the Directive 1999/62/EC. With this proposal the Commission wants to allow, road tools and charges to include the external cost of local pollution (air and noise) and congestion in addition to the cost of constructing and maintaining the infrastructure. The aim is to stimulate a more efficient use of infrastructure as well as the use of cleaner lorries. These new smart and green charges will generate new revenues which should be earmarked to promote sustainable mobility.

Within the framework of Directive 1999/62/EC Member States may already apply a cross-financing scheme on cross-border roads in mountain areas in order to finance the construction of priority rail projects on those axes. Such a scheme has been put in place by Austria on the Brenner Highway and similar schemes are in preparation by Italy for both the Brenner and the Mont Cenis.

# 2.2.2. Private financing in the delivery of TEN-T projects

In view of the budgetary difficulties and the constraints on public borrowing, the public sector agencies are increasingly exploring options for alternative models for infrastructure delivery, often based on a stronger involvement of private sector in both financing and management of infrastructure. Such models bring a number of benefits, in terms of access to new sources of financing for infrastructure limiting impact of infrastructure investment on public debt and deficit (through transfer of risk to the private partner) or efficiency improvements in providing transport infrastructure. Private sector involvement often brings in not only financing but also knowhow, expertise, innovation capability, new methods of management, better access to benchmarking data, etc.

In infrastructure projects, the degree of private sector involvement varies widely, from traditional works or service contracts to full privatization. Public Private Partnerships (PPP) lie between these two extremes, and can take different forms, notably as regards the risk-sharing between the private sector and public authority.

# How can private financing complement public funding?

There are cases in the transport sector where private financing has completely taken over from public financing, in the sense that a private company or consortium takes care of the financing, the design, the construction and the operating of a large public infrastructure *wholly and solely* at the developers' own risk. As regards PPP, they have been used more often, but have mainly concerned engineering structures such as tunnels or bridges, or motorway concessions<sup>13</sup>. Private sectors' appetite to finance and operate transport infrastructure is naturally dependent on the likelihood of such investment to be economically profitable. The combined financing and

Estimation from TEN-T Implementation report 2004-2005, TINA Vienna for the European Commission.

Not including the specific cases of ports or airports which could not always be fully considered as large *public* infrastructure.

operation of transport infrastructure offers a number of advantages in this respect. The durability of the structure (once constructed it will last for decades), makes it possible, if the partnership is properly structured notably in terms of overall duration, to envisage a long-term return with relatively limited risks of default. This can be attractive for example for pension and sovereign funds, which are looking for stable, long-term returns and there is indeed an increasing interest in attracting such investment vehicles into infrastructures projects.

Promising as it may be, the use of PPPs in bridging the infrastructure gap may still not have been used to its full potential. It is necessary to look into ways how this can be achieved.

The key challenge is probably for public authorities to develop the necessary skills and know-how to deal with these new financing models. This requires sometimes a cultural change for public authorities which have to move from the logic of traditional public procurement to a new logic of partnership with the private sector. To achieve this, a strong political commitment may be necessary.

Risk sharing is at the essence of PPP and is one of the aspects of the model that needs to be carefully considered. Risks may be of different types: political risk, construction risk and revenue risk. In a full private financing scheme, all these risks fall to the private sector and this can be a serious barrier to its involvement. The major area of difficulty in formulating PPP arrangements is usually the revenue risk. This is sometimes difficult to assess at the outset, since it may be influenced by many different aspects such as, for example, the quality and the extent of the existing network (and further investments) that links to the infrastructure, notably catering for other transport modes, and the overall evolution of prices in the economy.

Moreover, since the infrastructure has to last for decades, its design should take into account an average maximum traffic to be in use, even though this maximum is unlikely to be reached in the early years of the operating period. This means not only that the overall timeframe of the PPP must take into account the need for a return on the initial investment that will build up only over the longer term, but also that the uncertainty surrounding the return in the first years of the project may be critical to its success. This is why the European Commission and the European Investment Bank (EIB) have launched the Loan Guarantee instrument for TEN Transport projects (LGTT), to support privately financed projects in the early stage of operation. The aim of the instrument is to mitigate the revenue risk of the early years of operation, enhance the overall credit quality of the project and thereby encourage a reduction of risk margins charged by financial institutions. LGTT is financed with a capital contribution of €1 billion (€500 million each from the Commission under the TEN-T budget and the EIB) which is intended to support up to €20 billion of senior loans.

Construction cost based grant in the framework of availability payment schemes is another instrument developed by the European Commission, to be used to contribute to availability payments during the operational phase. It allows for TEN-T budget support to privately financed projects based on a significant risk transfer. Such availability payments schemes provide a possible way to involve private financing, where the public sector would pay according to the "availability" of the facility, with penalties e.g. for closures and disruptions to traffic.

It is clear that these initiatives can be usefully complemented and that further reflection is needed in this area. The Commission wishes to engage in a dialogue with Member States and stakeholders on this subject matter, in particular on how to make a better and more widespread use of Public-Private Partnerships.

#### 2.3. Coordination

#### 2.3.1. Coordination needs

Infrastructure projects are complex processes which demand cooperation among a range of partners who can include authorities at Member State level, regional and local authorities, transport mode related undertakings (eg. railway companies and network operators), construction companies, certifying and controlling authorities, interest groups (e.g. chambers of commerce) and last but not least citizens having a direct or indirect stake in such projects.

For projects of European Interest such as the Priority Projects, and especially the cross-border sections, the partners involved are multiplied by a factor two or more, depending on the number of countries involved. This is the case for small projects as well as for very large projects. For example, on the section between München and Salzburg, the bridge over the river Saalach constitutes a cross-border project. This implies the need for a cross-border environmental impact assessment, cooperation between several German and Austrian ministries, the competent regional authorities of Bavaria and Salzburg and the two responsible infrastructure managers. An existing bilateral treaty had to be amended.

For a large project like the Brenner Base Tunnel, the coordination has to go even beyond the two partners directly involved in the project, Austria and Italy. Here further coordination is necessary with Germany in order to ensure the timely development of the access routes to the tunnel and to discuss and coordinate issues such as traffic forecasts, timetables and investments. The complexity of the coordination therefore increases even further.

Coordination needs are extensive. They range from the very first studies, economical feasibility and environmental impact studies, defining the final alignment of the project, through project approval, financing and execution processes to operational issues (which may require extensive testing of the new infrastructure). Moreover, cross-financing schemes, maintenance, security and safety provisions are all aspects which will continue to require effective coordination long after the project has been put into service.

# 2.3.2. European Coordinators

Given this background it can be appreciated why the major trans-European transport projects require sustained coordination between the Member States involved. This is why, in July 2005, after consultation with the European Parliament and with the agreement of the Member States concerned, the Commission appointed six European coordinators for five rail projects and ERTMS: Loyola de Palacio (replaced by Laurens Brinkhorst in July 2007), Karel Van Miert, Etienne Davignon, Péter Balázs, Pavel Telicka and Karel Vinck. Two further coordinators were nominated in 2007: Carla Peijs for inland waterways, and Luis Valente de Oliveira for motorways of the sea. The mandate of these coordinators requires them to draw up an annual report on their activities.

From a general point of view, the appointment of coordinators has been a positive experience which has made it possible to stimulate the priority projects concerned. Their action has brought transparency concerning the progress with these corridors which represents an additional safeguard for the Commission in enabling it to enter into financial commitments with a full knowledge of the facts. It emerges from the analysis carried out by the coordinators that these projects/corridors are to a large extent dependent on support from the Community since certain sections are above all of Community interest.

Aside from financial aspects, the coordinators' activities also highlighted the importance of strengthened coordination between Member States to ensure effective implementation of the projects. The possibility of approaching a project or a corridor in an overall manner thus helped create an awareness, among the authorities concerned, of the need to set up common planning or management structures. The coordinators' comments are, in this context, important because they point out the need to reinforce an integrated network policy. This should not simply be a "major works" approach with short-term objectives but should also represent a key element of a sustainable transport policy, with longer-term objectives.

An integrated network policy aims to bring together all related aspects of transport policy, but also other key elements such environmental or regional considerations. Decision 884/2004 clearly laid down these priorities. The new rail connection over the Brenner on PP 1 will only bring optimal results if these works are coordinated with the logistic chains north and south which should allow to transfer goods from road to rail. This directly links to interoperability and to the dedicated rail freight network objective and at the same time to the environmental standards on air quality which are not met within the specific weather conditions of the Alpine valleys. This integration of several policy objectives has been the objective of the 'Brenner Corridor Platform' which has been set up to coordinate activity beyond the mere infrastructural aspects of the construction of the Brenner Base Tunnel and its northern and southern access routes.

Coordination difficulties do not only occur across national borders. It can be the case that coordination mechanisms within a country are insufficiently developed in terms of implementation and deployment of major infrastructure. One example of this could be in the rail sector where major restructurings have not yet been completely embedded, and where the effects of recent liberalisation measures are yet to be experienced. This could potentially lead to tensions between e.g. infrastructure managers, operators, maintenance bodies etc.

All such scenarios lead to a conclusion that for all trans-European transport priority projects, a coordination between all partners involved can only lead to improved results and better value for money for the taxpayer in the long run.

# 2.3.3. Project preparation and planning

"Project Delivery" is key to the success of all infrastructure development. Good quality infrastructure that is produced to time and to budget, and which meets the expected objectives and performances is the aspiration of

all Decision makers. In reality however, the picture is one where delays, cost overruns and poor output may occur along with a lack of interconnectivity and/or interoperability.

For a TEN-T policy and development programme where efficient use of funding is crucial, it is vital to identify the key factors (and related indicators) that characterise successful projects – and also those that prove more problematic.

Some elements have begun to emerge from different TEN-T studies (e.g. Ex-post evaluation of TEN-T MIP 2001-2006 and ex-ante evaluation of TEN-T MAP 2007-2013) and research (e.g. NETLIPSE RTD/FP6). They range from the administrative capacity of the Member States (planning, programming) to the quality of the project management processes. At the core of the difficulties are often issues of a lack of pragmatism and realism regarding both investment and deadlines. Without these, decision-makers cannot make informed decisions.

It has become apparent that dates shown in the list of projects included in the updated TEN-T guidelines in 2004 <sup>14</sup> were most certainly wishful rather than realistic and objectively based. With construction periods of 10 years or more, large projects were never to be realised by 2012, 2015 or 2015/17. Such overly ambitious declarations lead to a weakening of the image of good delivery of the TEN-T network.

The way ahead must work towards a situation that overcomes these difficulties. This entails the best possible initial gathering of information and knowledge, including sound economical proof, followed by a full consideration at an early stage of all the external factors and risks (e.g. environment, technical difficulties) before defining realistic deadlines and investment costs. Thereafter it calls for the need to plan and set-up an adequate project management system that both evaluates (by means of a thorough assessment of risks and ways to mitigate them) and monitors (including using appropriate indicators to measure its deviation or consistency with timing or objectives) the preparation and/or implementation of the project.

The availability of suitably qualified and experienced technicians (in programme, project management and delivery) varied from country to country. This in turn affects the ability to deliver both at the level of the national administration and individual project promoters.

## 2.4. Regulatory constraints

It is often claimed that regulatory constraints put a burden on the progress, and even on the financing, of infrastructure projects. Reference is made to territorial planning, economic appraisal and environmental impact assessment, which are seen as time-consuming and costly. It has to be underlined that regulatory procedures are an integral and indispensable part of the life cycle of transport infrastructure projects, and that they are based on relevant national legislation as well as – especially in the field of environmental legislation and public procurement – on relevant Community law. These procedures, intended to ensure highest possible quality of project preparation at the lowest possible cost for society, are partly subject to a democratic process (public consultations etc.) and the principle of subsidiarity. Clearly, the efforts put in at the outset in terms of proper project preparation in this regard can lead to a smooth implementation of the project concerned.

In the past decade, the Commission has spent a considerable part of the available TEN-T budgetary resources to support studies related to the undertaking of administrative procedures (feasibility, detailed technical design and environmental impact assessment studies, the latter two directly related to the development consent procedure) – in many cases at the maximum 50 % funding rate. This has greatly helped accelerating the studies needed to launch the relevant administrative procedures.

Community environmental protection legislation provides a framework in which these projects have to be implemented. The Community guidelines for the development of the trans-European transport network refer to it explicitly<sup>15</sup>. Each new infrastructure programme has to undergo a strategic environmental assessment<sup>16</sup> and each project has to be assessed on an individual basis<sup>17</sup>. This double obligation makes it possible to optimise the implementation of the major infrastructure projects from the environmental angle.

Apart from these environmental assessments, each individual project has to comply with Community legislation on noise, water and the protection of flora and fauna<sup>18</sup>. If an impact is found on any of these aspects,

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Decision 884/2004/EC OJ L 201, 29.4.2004

Article 8 of the above mentioned Decision No 884/2004/EC.

Strategic Environmental Assessment (SEA) Directive (2001/42/EC) for plan and programme assessment.

Environmental Impact Assessment (EIA) Directive (85/337/EEC as amended by Directives 97/11/EC and 2003/35/EC) for project assessment.

Birds Directive (79/409/EEC), Habitats Directive (92/43/EEC) and Water Framework Directive (2000/60/EC).

alternatives will have to be looked for in order to guarantee that environmental legislation is complied with as far as possible. If none of the alternatives to a project declared to be in the public interest is considered to be an optimum solution and in line with Community legislation, compensatory measures may be adopted which will allow the project to be carried out while at the same time compensating for any negative impact. The Commission has worked out a very specific modus operandi which will enable to resolve any logjams that may arise between the particular circumstances of each investment project and the need to comply with environmental legislation<sup>19</sup>.

The penalties for non-compliance with the legislation can be considerable. Schemes have been criticised for procedural reasons e.g. because there was insufficient consultation with the public. Non observance of such provisions can prove costly in terms of negative media attention as well as time delays and cost increases.

For the future there may be a need, at the level of the Community, to exchange best practices between Member States.

#### 3. QUESTIONS FOR DISCUSSION

The TEN-T network is progressing. Three projects are finalised and a further three are nearing completion. Other projects are progressing well within a majority of Member States. However, progress on cross-border sections remains critical as well as progress on the elimination of the most complex bottlenecks.

A range of issues and questions are proposed for discussion below.

#### On Financing:

The European economy relies highly upon a functional and efficient transport infrastructure network. Investment in the network has gone down, but conversely, the needs are growing rapidly. Freight transport has almost doubled over the last 20 years and has the potential to double again over the next 25 to 30 years. Private financing is unlikely to entirely fill this growing gap, due to a series of reasons described above.

- On public financing:
  - Why has the percentage of GDP dedicated to the infrastructure investment gone down?
  - Can Member States confirm their financial commitments for project works which have been confirmed for this period?
  - Is the EU financial intervention providing sufficient leverage for realising the main cross-border sections and bottlenecks on the TEN-T network?
  - How can other public financing schemes, like cross-financing, be developed?
- On private financing:
  - What can be done at EU level to foster private sector involvement in infrastructure investment, notably through a better and more widespread use of Public-Private Partnerships ("PPPs")?
  - How can Member States develop solid competencies in order to better deal with PPPs? What could be the role of the EU in that matter?

# On Coordination

The complexity of the often huge TEN-T projects requires to set-up an adequate project management system that both evaluates and monitors the preparation and implementation of the project.

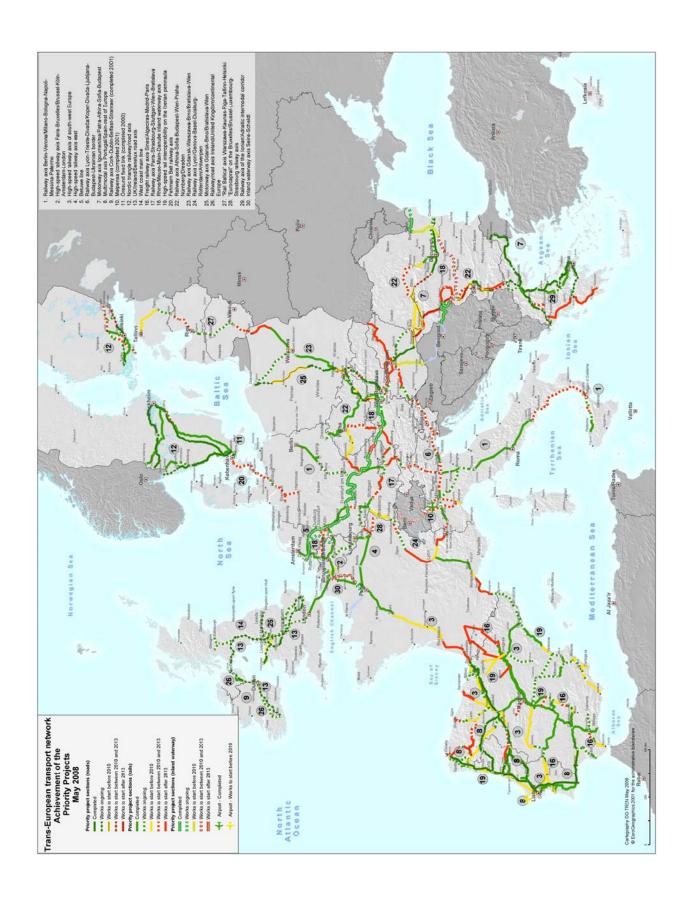
- How far can the integrated corridor approach be extended to all Priority Projects?
- In particular, should corridor structures be set-up? How should these structures be managed? What is the role of the EU?
- Can the open method of coordination carried out at European level generate critical mass and exchange of experience that will contribute to the timely realisation of TEN-T projects?
- How can the timely and efficient delivery of the 30 Priority Projects be ensured? What is the role of the Member States and of the EU?
- Does the Commission's analysis of the problems in this area leave out any important elements?
- Is there a role for the Commission in disseminating and promoting best practice as a means to improve project delivery?

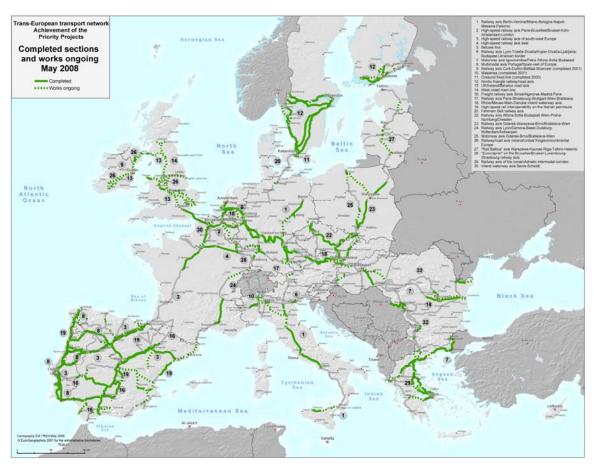
<sup>&</sup>quot;Towards an integrated approach to trans-European transport, energy and telecommunications networks" – Commission's communication of 21 March 2007

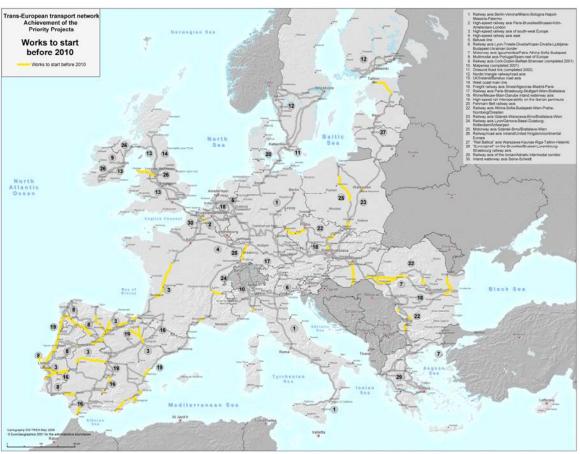
# On Regulatory Issues

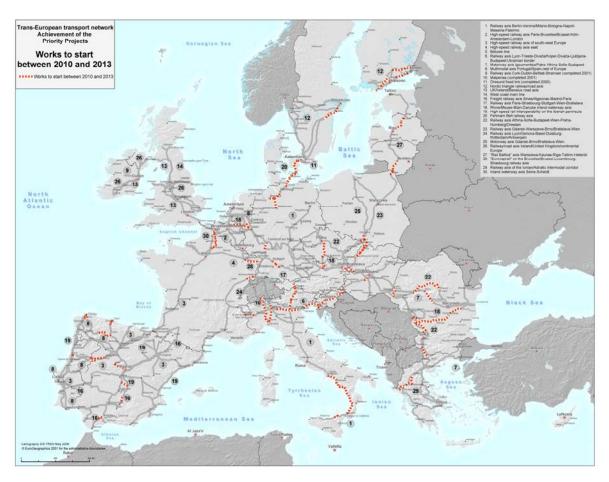
Project preparation through thorough studies is an indispensable part of the life-cycle of projects and therefore need to be given due attention.

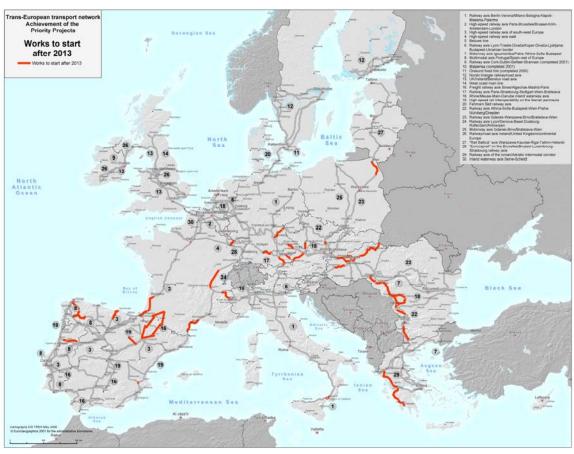
- What steps can Member States and project promoters take to ensure regulatory issues are identified and tackled at the earliest possible stage?
- Can the EU provide more assistance/guidance to help in this task?













# **EUROPEAN COMMISSION**

**DIRECTORATE GENERAL FOR ENERGY AND TRANSPORT DIRECTORATE B – Transport Logistics, TEN-T and Co-modality**