

European Commission

DG TREN Contract

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Ex-post/Final evaluation of the Trans-European Transport Network Multi-annual Indicative Programme 2001-2006

Annexes – November 2007

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1. ANNEX 1 – LIST OF THE INTERVIEWEES

NATIONAL MIP RESPONSIBLE OFFICERS

Table 1 – List of national MIP Responsible Officers interviewed

Country	Name	Organisation	Function	Meeting date
Austria	H. Roland Schuster	Bundesministerium für Verkehr, Innovation und Technologie	Deputy-Head of Division for EU-affairs Expert for Trans European Transport Networks	4/06/2007
Belgium	Carole Coune	SPF Transport and Mobility	General Director	20/07/2007
	Beatrice de Feyter	SPF Transport and Mobility	Advisor	20/07/2007
	Joan Peeters	SPF Transport and Mobility	Advisor	20/07/2007
	Luc Lebrun	SPF Transport and Mobility	Director	20/07/2007
Denmark	Steen Jonsen	Ministry of Transport and Energy EU and air transport Division	Senior Advisor	7/05/2007
Finland	Anneli Tantt	Ministry of Transport & Communications	Senior Engineer, Infrastructure Unit	9/05/2007
France	Patrick Faucheur	Ministry of Ecology, Sustainable Development and Town and Country Planning	Chargé de mission "Réseau de transports européens et OCDE"	23/05/2007
Germany	H. Jürgen Papajewski	Federal Ministry of Transport, Building and Housing	Head of Division for international investment programmes and TEN-T	30/05/2007
	Ilka Gohr	Federal Ministry of Transport, Building and Housing	Desk officer	30/05/2007

Country	Name	Organisation	Function	Meeting date
	Karoline Büsching	Federal Ministry of Transport, Building and Housing	Deputy head of division	30/05/2007
Greece	Georgious Logothetis	Ministry of Economy and Finance	Head of Unit EU programmes	6/06/2007
	Vasiliki Diavolitsi	Ministry of Economy and Finance Cohesion Fund Management Authority	Desk officer Coordination of Transport Projects	6/06/2007
Ireland	Andrew F. Cullen Lauren O'Dea	Public Transport Planning Division, Department of Transport	Assistant Secretary General	2/05/2007
Luxembourg	Anouk Enschedé	Ministry of Transport Directorate general Coordination	Desk officer European and Justice Affairs	21/06/2007
	André Biessen	Ministry of Transport Direction of Public Transport and Railway	Accountant Railway Direction	22/06/2007
The Netherlands	Ivo de Zwaan	Ministry of Transport, Public works and Watermanagement	Senior Advisor - Central Direction International Affairs	12/06/2007
Portugal	Maria do Carmo Vasconcelos	IOT (Intervenção operacional de acessibilidades e transportes)	Manager	05/06/2007
	Germano Farias Martins	IOT (Intervenção operacional de acessibilidades e transportes)	Project manager	05/06/2007
Spain	José Luis Romero González	Ministerio de Fomento	Planning of Infrastructures and Transport	16/05/2007
Sweden	Niklas Lundin	Enterprise Ministry	Deputy Director	7/05/2007

Country	Name	Organisation	Function	Meeting date
United Kingdom	Rosa Estevez	Department for Transport Europe, International and Better Regulation Division	Head Of TENT-T Team	24/07/07
	Nick Milford	Department for Transport Europe, International and Better Regulation Division	TENT-T Advisor	24/07/07
Italy	Gianpaolo Basoli	Direzione Affari Internazionali Ministero della Infrastrutture e dei Trasporti	Deputy Head of Cabinet for Italian Transport Minister	26/07/07

PROJECT PROMOTERS

AUSTRIA

Table 2 – List of Project Promoters interviewed - Austria

Project ref.	Name	Organisation	Function	Meeting date
PP104	Markus Woletz	Brenner Basistunnel BBT SE	Finance Manager	5/06/2007
GR3001	Christian Schramm	via Donau - Österreichische Wasserstrassen- Gesellschaft mbH	Team Manager River Engineering Project	5/06/2007
GR3001	Marcus Simoner	via Donau - Österreichische Wasserstrassen- Gesellschaft mbH	Project Leader National Action Plan	5/06/2007
GR1001	Edith Hofmann	ÖBB Infrastruktur Bau AG	EC-grants and subsidies from third Parties	4/06/2007

BELGIUM**Table 3 – List of Project Promoters interviewed - Belgium**

Project ref.	Name	Organisation	Function	Meeting date
PP204	Anastasia Laiös	Infrabel	Financial Analyst	21/06/2007
PP204	Marc Smeets	Infrabel	General Manager Finances	21/06/2007
PP204	Guy Vernieuwe	Infrabel	Manager	21/06/2007

DENMARK**Table 4 – List of Project Promoters interviewed - Denmark**

Project ref.	Name	Organisation	Function	Meeting date
GR3010	Lars Deigaard	The National Rail Authority	Administrator	7/05/2007
GR3010	Martin Munk Hansen	The National Rail Authority	Project manager	7/05/2007
GR3009	Claus Dynesen	Fernern Baelt A/S	Manager	8/05/2007
GR3009	Gregers Jensen	Fernern Baelt A/S	Financial Manager	8/05/2007
GR3009	Carsten Vædele Madsen	Ministry of Transport and Energy Bridges and Ports Division	Advisor	8/05/2007
GR3010	Bastian Zibrandtsen	Ministry of Transport and Energy Collective transport Division	Senior Advisor	8/05/2007

FINLAND**Table 5 – List of Project Promoters interviewed - Finland**

Project ref.	Name	Organisation	Function	Meeting date
PP1205 GR1205	Harri Yli-Villamo	Finnish rail Administration	Head of Project Planning Unit	9/05/2007
PP1205	Kaarina Korander	Finnish rail Administration	Senior Engineer Project Planning	9/05/2007

Project ref.	Name	Organisation	Function	Meeting date
			Unit	
PP1205	Juha Kansonen	Finnish rail Administration	Head of Project Management Unit	9/05/2007
PP1204	Ilkka Komsu	Finnish Road Administration	Senior Engineer Financial Planning	10/05/2007
PP1204	Marku Kivari	Strafica Oy	Consultant	10/05/2007

FRANCE

Table 6 – List of Project Promoters interviewed - France

Project ref.	Name	Organisation	Function	Meeting date
PP603	Gérard Cartier	Lyon Turin Ferroviaire	Directeur « Etudes et Projet »	3/09/2007
PP603	Paul Fraisse	Lyon Turin Ferroviaire	Responsable financier	3/09/2007
PP603	Sonia Souadi	Lyon Turin Ferroviaire	Direction projet	3/09/2007
PP304 PP401 PP602 GR1110	Anouk Vanommeslaeghe	Réseau Ferré de France	Responsable subvention Direction financière	6/09/2007
PP401	Christophe Martineau	Société d'Etudes Techniques et Economiques (SETEC)	Consultant LGV Est	6/09/2007

GERMANY

Table 7 - List of Project Promoters interviewed - Germany

Project ref.	Name	Organisation	Function	Meeting date
PP402	Gisele Weper	DB ProjektBau GmbH, RB Mitte I.BF-MI E		29/08/2007
PP402	Bert Bohlmann	DB ProjektBau GmbH, RB Mitte		29/08/2007

Project ref.	Name	Organisation	Function	Meeting date
		I.BF-MI P (3)		
PP203	Franziska Lentes	DB Netz AG, RB West I.NP-W-D Köl. (P)		29/08/2007
PP203	Hans Peter Spitzlay	DB Netz AG, RB West I.NP-W-D Köl. (P)		29/08/2007
PP101	Gunnar Dewald	DB ProjektBau GmbH, RB Ost I.BF-O (2)		29/08/2007
GR3004	Hannelore Krause	DB ProjektBau GmbH, RB Ost I.BF-O (3)		29/08/2007
GR3004	Sven Wroblewski	DB ProjektBau GmbH, RB Ost I.BF-O (3)		29/08/2007
PP102	Ursula Hofmann	DB ProjektBau GmbH, RB Süd I.BS-S (6)		29/08/2007
PP102	Thomas Wenzel	DB ProjektBau GmbH, RB Süd I.BS-S (6)		29/08/2007
PP102	Brigitte Kretschmer	DB Netz AG, Zentrale I.NFF 2 E		29/08/2007
PP102	Sieglinde Olm	DB ProjektBau GmbH, Zentrale I.BFP 1		29/08/2007

GREECE**Table 8 – List of Project Promoters interviewed - Greece**

Project ref.	Name	Organisation	Function	Meeting date
GR1014	Isaia Linda	ERGOSE	Head of Planning and Programme Implementation Directorate	6/06/2007
PP701	Zoe Papasiopi	Agnaitia	Head of Planning, Project Finance and Project Control Division	7/06/2007
PP701	Alexandros Mavavas	Agnaitia	Head of Project control Ubit, Project Monitoring Department	7/06/2007

IRELAND**Table 9 – List of Project Promoters interviewed - Ireland**

Project ref.	Name	Organisation	Function	Meeting date
PP901	Tom Finn	Iarnród Éireann	Manager, Transport 21	2/05/2007
PP901	Tony Murray	Iarnród Éireann	Manager Exchequer & Grants	2/05/2007
PP901	Derek O'Neill	Department of Transport	CIE Investment/Corporate Affairs Division	2/05/2007
PP1301	Phil Hopkins	Department of Transport	Principle officer and Social Infrastructure Operational Programme Unit, Road Policy	4/05/2007
PP1301	John Brown	Department of Transport	Principle officer and Social Infrastructure Operational Programme Unit, Road Policy	4/05/2007

Project ref.	Name	Organisation	Function	Meeting date
PP1301	Richard Evers	The National Roads Authority	Head of EU Administration	2/05/2007
PP1301	David McGill	The National Roads Authority	Resident Engineer	3/05/2007
PP1301	John Coppinger	The National Roads Authority	Senior Engineer	4/05/2007

ITALY

Table 10 - List of Project Promoters interviewed - Italy

Project ref.	Name	Organisation	Function	Meeting date
PP605 PP606 PP607 PP608 PP609 GR1019	Paolo Parilla	FERROVIE DELLO STATO SpA	Finance Responsible External Support	26/07/07
PP605 PP606 PP607 PP608 PP609 GR1019	Pierluigi Pulone	FERROVIE DELLO STATO SpA	Finance Professional External Support	26/07/07

LUXEMBOURG

Table 11 - List of Project Promoters interviewed - Luxembourg

Project ref.	Name	Organisation	Function	Meeting date
GR1020	Manon Mehling	SNCFL	Desk officer Financial Coordination	22/06/2007
GR1020	Robert Sturm	SNCFL	Manager of Financial Coordination	22/06/2007

SPAIN**Table 12 - List of Project Promoters interviewed - Spain**

Project ref.	Name	Organisation	Function	Meeting date
PP301	Antonio Hernández Parro	ADIF (Administrador de Infraestructuras Ferroviarias)	FEDER aids and other community aids manager	29/08/2007

THE NETHERLANDS**Table 13 – List of Project Promoters interviewed – The Netherlands**

Project ref.	Name	Organisation	Function	Meeting date
GR1201	J.B. Claus	Directorate General for Passenger Transport	Senior Member Staff	12/06/2007
PP501	I.B. Schortinghuis	Directorate General for Public Works and Water Management	Controller	12/06/2007
PP501	B.J.H.Nelissen	Project Organisation Betuweroute	Head Finance	13/06/2007
PP201	Mrs. Gerrie Groen	Highspeed Line South	Senior Member Staff	13/06/2007

UNITED KINGDOM**Table 14 - List of Project Promoters interviewed – United Kingdom**

Project ref.	Name	Organisation	Function	Meeting date
UK	Rosa Estevez	Department for Transport Europe, International and Better Regulation Division	Head Of TENT-T Team	24/07/07
UK	Nick Milford	Department for Transport Europe, International and Better Regulation Division	TENT-T Advisor	24/07/07
PP1302	Chris Shucker	Department for Transport Highway Agency	Project Manager	24/07/07
PP 1401	Stuart Baker	Department for Transport Dft Rail Projects	Divisional Manager (National)	25/07/07
PP 1401	Simon Malpe	Network Rail	Head of Programme Investment, West Coast	25/07/07
PP 1401	Martin Zobel	Network Rail	Financial Controller, West Coast Main Line	25/07/07
PP 202	Carol Anderton	Union Railways North Ltm.	Treasurer and cash manager Finance Team	25/07/07

PORTUGAL**Table 15 – List of Project Promoters interviewed - Portugal**

Project ref.	Name	Organisation	Function	Meeting date
PP801	Mr Rui Sarmiento Veres	NAER (Novo Aeroporto SA)	Administrator ANA	04/06/2007
PP801	Paula Alves	NAER (Novo Aeroporto SA)	General Director	04/06/2007

Project ref.	Name	Organisation	Function	Meeting date
PP801	Pedro Nuno Soares	NAER (Novo Aeroporto SA)	Tecnico Superior	04/06/2007
GR1023	Paulo Farinha	RAVE (Rede ferroviaria de alta velocidade)	Chief Information Officer	04/06/2007
GR1023	Tiago Rodrigues	RAVE (Rede ferroviaria de alta velocidade)	Finance Director	04/06/2007

SPAIN

Table 16 – List of Project Promoters interviewed - Spain

Project ref.	Name	Organisation	Function	Meeting date
PP301, 302, 303, 802, GR1009	Rosa Sebastian Escolano	Administrador de Infraestructuras Ferroviarias (ADIF)	Community funds Director	16/05/2007
PP306	Jean-Philippe Miquel-Elcano	TP Ferro	Works and Studies Responsible	18/05/2007
PP306	Ramon Conde	TP Ferro	Communication and Marketing Director	18/05/2007
PP306	Manuel Niño González	Ministerio Fomento/Direccion General de Ferrocarriles	Technical Adviser	17/05/2007
PP306	Jorge Ballesteros Sánchez	Ministerio Fomento/Direccion General de Ferrocarriles	Technical Adviser	17/05/2007
PP306	Angel Checa Benito	Ministerio Fomento/Direccion General de Ferrocarriles	Technical sector coordinator	17/05/2007

SWEDEN**Table 17 – List of Project Promoters interviewed during - Sweden**

Project ref.	Name	Organisation	Function	Meeting date
PP1201	Per Nordgren	Citytunneln	Costcontroller	8/06/2007
PP1201	Örjan Larsson	Citytunneln	Executive Project Director/CEO	8/06/2007
PP1202	Per Olof Lingwall	Swedish Rail Administration	Financing issues, EU	7/06/2007
PP1202	Dan Sennerby	Swedish Rail Administration	Project Director	7/06/2007
PP1203	Lars Bergman	Swedish Road Administration	Planning and Monitoring Section	5/06/2007
PP1203	Kurt Kristianson	Swedish Road Administration	Costcontroller	5/06/2007
PP1203	Christer Claesson	Swedish Road Administration	Head of Road Construction Vänersborg Section	5/06/2007

2. ANNEX 2 – INTERVIEW GUIDES

Interview guide: Project Promoters

Identification of the respondent	
Name	:
Function/Title	:
Institution	:
Country	:
Interviewer	:
Date of the interview	:

Pre-identification of the project (pre-filled in)	
Name	:
Short description + type (works or study)	:
Overall budget	:
MIP contribution by year:	
Any other comment	:

Situation setting

1. Position/role/responsibilities of the interviewee/organisation regarding:

- The funded projects: reporting, (co)financing, implementation, evaluation (ex-ante, impact assessment, ex-post evaluation...), timeframe...;
- The MIP (did the interviewee play a role of coordination with EU, reporting towards EU);
- The TEN-T (eventually, did the interviewee play a role in the development of the TEN-T).

Project evaluation

1. What is the history of the project? (i.e., the overall infrastructure project)

Please make a clear distinction between phases performed before and under the MIP

Element to be assessed by the interviewer:

- *When has the decision been taken to undertake the project?*
- *What were its different steps?*
- *If it is an investment project, what preliminary studies have been performed?*
- *What is overall timeframe planning? of the project? (start date and foreseen end date)*
- *Has it been maintained? If no, for what reasons?*
 - *Unforeseen reasons (technical, environmental or political issues)*
 - *Financial issues (problems in finding financing sources)*
 - *Cash-flow issues*
 - *Project management issues*
 - *Other*

- *How has it been financed? (different financing sources and mainly EIB, PPP's,... as communicated by the interviewee in the financial forms before the interview)*
- *What were the obstacles to PPP's?*
- *Check the accuracy of the financial tables we have*

2. Did you perform a risk mitigation plan at the beginning of the project?

3. Did you perform a cost-benefit analysis? On basis of what data/indicator(s)?

- *Net present value*
- *Benefit/cost ratio*
- *Internal rate of return*
- *Pay back period*

4. You have communicated to us foreseen (and actual) profitability indicators, how did these indicators evolve over time? What are the reasons of such an evolvement of the indicators?

5. At the moment being, how do you perceive the economic viability of the project?

6. What were the project's objectives? Did they change during the implementation? What are they now? *Make the distinction between the project and the different project parts (studies...)*

- *Have these objectives been identified at the beginning of the project?*
- *Are these objectives linked to the operational TEN-T objectives (interviewer can mention them if needed):*
 - *interoperability*
 - *intermodality*
 - *improvement of the quality of infrastructure*
 - *resolving bottlenecks*
 - *filling missing links*
 - *optimization of the use of infrastructure*

7. What are the current deployment activities of the project and which are still to be delivered?

- *Deadlines*
- *Future steps of the project*
- *Reasons for non deployment*
- *Is funding committed to these projects - percentage and which types (for study projects only)*

8. Are there already visible results of the project? Which ones? In what domains? *Make the distinction between the project and the different project parts (studies...)*

Are there already effects on the strategic TEN-T objectives:

- *Regional development*
- *Employment*
- *Environment*
- *Sustainable development*
- *Traffic*
- *Competition*
- *Free movement of persons and goods*
- *Cross-border / trans-national cooperation*

➔ *If yes – is there any quantitative or qualitative data available on these results?*

9. If there are no visible results yet – what are the main reasons for this?

- *What were the main obstacles?*
 - *In the implementation of the project;*
 - *Funding ;*
 - *Political decisions;*
 - *Etc.*

10. If there are no visible results, what are the expected results of the project?

In terms of:

- *Regional development*
- *Employment*
- *Environment*
- *Traffic (e.g. improvement of existing infrastructure, resolution of bottlenecks...)*
- *Competition*
- *Free movement of persons and goods*
- *Cross-border / transnational cooperation*

11. To what extent are there differences between planned and actual costs and why?

12. In your opinion, what is the European dimension of the project?

Note to the interviewer: the European dimension must be considered in terms of inter-connection and interoperability between national networks, link between central and peripheral regions, sustainable mobility and intermodal shift.

MIP Results and Impact

1. In your opinion, what would have been different in the project without the MIP?
 - *Existence of the project*
 - *Size of the project*
 - *Profitability of the project*
 - *Financial risk*
 - *Economic risk*
 - *Timeframe of the project*
 - *Access to financing sources*
 - *Objectives*

2. In your opinion what is the added value of the MIP for the project?
 - *Better foreseeability*
 - *Better accountability*
 - *Better flexibility*
 - *Attractiveness to private investors*
 - *EU financial support (impact on profitability, decision making)*
 - *Important for studies that are not easily cofinanced by third parties*
 - *Limit the risk of not achieving the project in time*
 - *Give a European visibility to the project*
 - *Give a significant impulse to undertake such type of projects*

3. Did the MIP facilitate the access to other financing sources? In your opinion, for what reason(s)?
 - *Encourage PPPs?*
 - *Better stability / foreseeability?*
 - *Amount of the EU support?*
 - *Attraction of other investors (signalling function)?*

4. Would you say that the MIP complemented significantly other financing instruments (EU or non EU)? Please elaborate.

5. To what extent did the fact that the support was granted for several years allow you to obtain better financial conditions?
 - *Impact of interest rate on loan*
 - *Reduction of capital cost linked to:*
 - *Foreseeability;*
 - *Accountability;*
 - *Flexibility.*

1. What was the impact of the MIP on the project management?
 - *Improvement of the administrative procedures (PSR, monitoring)*
 - *Definition of objectives ex-ante*
 - *Culture of evaluation / monitoring*
 - *Improvement of the budgeting*
 - *Improvement of the planning*
 - *Increase of administrative burden*
 - *Disturbance of the project planning*
2. Did the MIP provide sufficient flexibility in order to take into account unforeseen technical or financial developments?
 - *How did the interviewee experience this flexibility/lack of flexibility?*
 - *Advantage and disadvantage of the multi-annual programming of the MIP?*
3. Have you been sufficiently informed by the Commission regarding the technical and financial information to provide on a regular basis? If any, what were the consequences?
 - *Monitoring tools (PSR or other)*
 - *Proposal forms*
 - *Existence of guidelines (e.g. vade mecum, call for proposals...)*
 - *Evaluation tools/process (e.g. collection of indicators, evaluation model, reporting...)*
 - *Requirement for impact analysis (e.g. on the environment)*
 - *Eligibility of costs*
 - *Suspension of payment after invoice submission*
4. What are, according to you, the advantages (disadvantages) of the MIP compared to the non MIP procedures (annual financing of TEN-T projects)?
5. Did the MIP planning match with the project planning? If any, what were the consequences?
6. What do you think about the following rules and procedures? In terms of easiness, quickness, utility for the project management?
 - *Preliminary applicant form*
 - *Detailed applicant form*
 - *PSR*
 - *Rule of the 50%-70%*
 - *Rule of maximum 2 budget instalments per project*
 - *MIP appraisal*
 - *Annual financial decision*
 - *Payment request procedure*
7. What was, from your point of view, the tangible results of the MIP revision in 2004 on the project?
 - *new TEN-T guidelines;*

- *specific environmental assessment of projects having significant effects on the environment;*
- *withdrawing of not started projects from the list of common interest projects;*
- *need to perform a socio-economic and environment assessment 5 years after the project completion;*
- *management requirements for cross border projects;*
- *rise in subsidies of 20% for cross border projects;*
- *more flexibility in the rule of maximum 2 budget instalments per project.*

8. When the project will be over, how will it be managed? How do you intend to maintain the value of the project's assets? Do you intend to implement in your other infrastructure projects some management procedures of the MIP for their quality and as good practice?

Interview guide: Member States

Identification of the respondent	
Name	:
Function/Title	:
Institution	:
Country	:
Interviewer	:
Date of the interview	:

Pre-identification of the projects selected for this country (pre-filled in)	
Name	:
Short description + type (works or study):	
Overall budget	:
MIP contribution by year:	
Any other comment	:
<i>Copy row for each project</i>	

Situation setting

2. Position/role/responsibilities of the interviewee/organisation regarding:

- The funded projects: reporting, (co)financing, implementation, evaluation (ex-ante, impact assessment, ex-post evaluation...), timeframe...;
- The MIP (did the interviewee play a role of coordination with EU, reporting towards EU);
- The TEN-T (eventually, did the interviewee play a role in the development of the TEN-T).

Project evaluation

First take a look to the financial tables of the different projects and identify reason why some projects ran more slowly than expected and, if any, why some decisions had been cancelled.

13. What were the selection criteria that your country applied in order to select the projects? Why did your country submit these projects to the EU?

14. In your opinion, to what extent did the different projects match the following?

Criteria	Yes	No	ISE	Comments
to be on a major European Axis				
to have a European dimension (more than 500 Mio Euro)				
to be economically viable				
to have a European added value (inter-connexion between national networks)				
to reinforce the European cohesion (linking central and peripheral regions)				
to contribute to the sustainable development of transport				

15. What was in general the financial engineering of the projects?

Financial parts provided by:

- *State;*
- *Regional authorities;*
- *Local authorities;*
- *TEN-T;*
- *EIB;*
- *PPPs;*
- *Others.*

Note for the interviewer: please check the accuracy of the financial forms they send for each project before our visit

16. If any, what were the obstacles to PPP's?

17. Are there already visible results of the projects? Which ones? In what domains?

Are there already effects on the strategic TEN-T objectives:

- *Regional development*
- *Employment*
- *Environment*
- *Traffic*
- *Competition*
- *Free movement of persons and goods*
- *Cross-border / trans-national cooperation including improved interoperability*
- *Intermodality*

➔ *If yes – is there any quantitative or qualitative data available on these results*

18. If there are no visible results yet – what are the main reasons for this?

- *What were the main obstacles?*
 - *In the implementation of the projects;*
 - *Funding ;*
 - *Political decisions;*
 - *Etc.*

19. If there are no visible results, what are the expected results of the projects?

In terms of:

- *Regional development*
- *Employment*
- *Environment*
- *Traffic (e.g. improvement of existing infrastructure, resolution of bottlenecks...)*
- *Competition*
- *Free movement of persons and goods*
- *Cross-border / transnational cooperation, including improved interoperability*
- *Intermodality*

20. In your opinion, what is the European dimension of the projects in your country?

Note to the interviewer: the European dimension must be considered in terms of inter-connection and interoperability between national networks, link between central and peripheral regions, sustainable mobility and intermodal shift.

MIP Results and Impact

1. In your opinion what is the added value of the MIP for the projects in your country?
 - *Better foreseeability*
 - *Better accountability*
 - *Better flexibility*
 - *Attractiveness to private investors*
 - *EU financial support (impact on profitability, decision making)*
 - *Important for studies that are not easily cofinanced by third parties*
 - *Limit the risk of not achieving the project in time*
 - *Give a European visibility to the project*
 - *Give a significant impulse to undertake such type of projects*

2. To what extent, did the European Commission via the MIP improve the European foundation of the projects?
 - *Prenegotiation between the Member States and the Commission before the project selection*
 - *Accurate selection of projects that contribute to the TEN-T at:*
 - *Regional (peripheral regions);*
 - *National (interurban links);*
 - *International level (cross-border projects).*
 - *Encouragement of the implementation of projects with high European added value*
 - *Funding prioritisation for the projects with the higher European added value (e.g. decision of the EU to upgrade its cofinancing up to 20% for cross-border projects)*

3. Would you say that the MIP complemented significantly other financing instruments (EU or non EU)? Please elaborate.

4. Did the MIP facilitate the access of the projects to other financing sources? In your opinion, for what reason(s)?
 - *Encourage PPPs?*
 - *Better stability / foreseeability?*
 - *Amount of the EU support?*
 - *Attraction of other investors (signalling function)?*

5. To what extent did the fact that the financial support was granted for several years have an impact of the capital cost of the projects?
 - *Impact of interest rate on loan*
 - *Reduction of capital cost linked to:*
 - *Foreseeability;*
 - *Accountability;*
 - *Flexibility.*

9. What was the impact of the MIP on the project management?

- *Improvement of the administrative procedures (PSR, monitoring)*
- *Definition of objectives ex-ante*
- *Culture of evaluation / monitoring*
- *Improvement of the budgeting*
- *Improvement of the planning*
- *Increase of administrative burden*
- *Other positive effects? Which ones?*
- *Other negative effects? Which ones?*

10. Did the MIP provide sufficient flexibility in order to take into account unforeseen technical or financial developments

- *How did the interviewee experience this flexibility/lack of flexibility?*
- *Advantage and disadvantage of the multi-annual programming of the MIP?*

11. What are, according to you the advantages (disadvantages) of the MIP compared to the non MIP procedures (annual financing of TEN-T projects)?

12. Did the MIP planning match with the project planning? If any, what were the consequences?

13. What do you think about the following rules and procedures? In terms of easiness, quickness, utility for the project management?

- *Preliminary applicant form*
- *Detailed applicant form*
- *PSR*
- *Rule of the 50%-70%*
- *Rule of maximum 2 budget instalments per project*
- *MIP appraisal*
- *Annual financial decision*
- *Payment request procedure*

14. What was, from your point of view, the tangible results of the MIP revision in 2004 on the project?

- *new TEN-T guidelines;*
- *specific environmental assessment of projects having significant effects on the environment;*
- *withdrawing of not started projects from the list of common interest projects;*
- *need to perform a socio-economic and environment assessment 5 years after the project completion;*
- *management requirements for cross border projects;*
- *rise in subsidies of 20% for cross border projects;*
- *more flexibility in the rule of maximum 2 budget instalments per project;*

3. ANNEX 3 – STRUCTURE OF THE DATABASE DEVELOPED DURING THE EVALUATION STUDY

3.1. Objectives of the database

The structure of the database has been designed to assess the main descriptive elements of the MIP and to facilitate the ex-post evaluation of the TEN-T MIP projects. Consequently its structure does not take into account elements that would demonstrate to be valuable for the day-to-day management of the financial decisions.

Keeping this in mind, it should be mentioned that the added value of this database is the specific design for the evaluation of projects which are supported on a multi-annual basis. The time dimension is incorporated in the logical structure of the database to make it possible to expand data analysis over a longer period (in this case 2001-2006). In addition, the level at which project information can be analysed is accrued to several levels (from the general priority project, defined at the Essen Conference at the highest level to the Annual Financial Decision Cost breakdown, at the lowest level).

3.2. Design of the database

In this section we firstly present the overall structure of the database and we discuss how relationships between the tables capture the underlying logic of the MIP structure. We then zoom in on the data content and configuration together with an overview of available fields. Finally, we briefly present the type of reports that have already been designed.

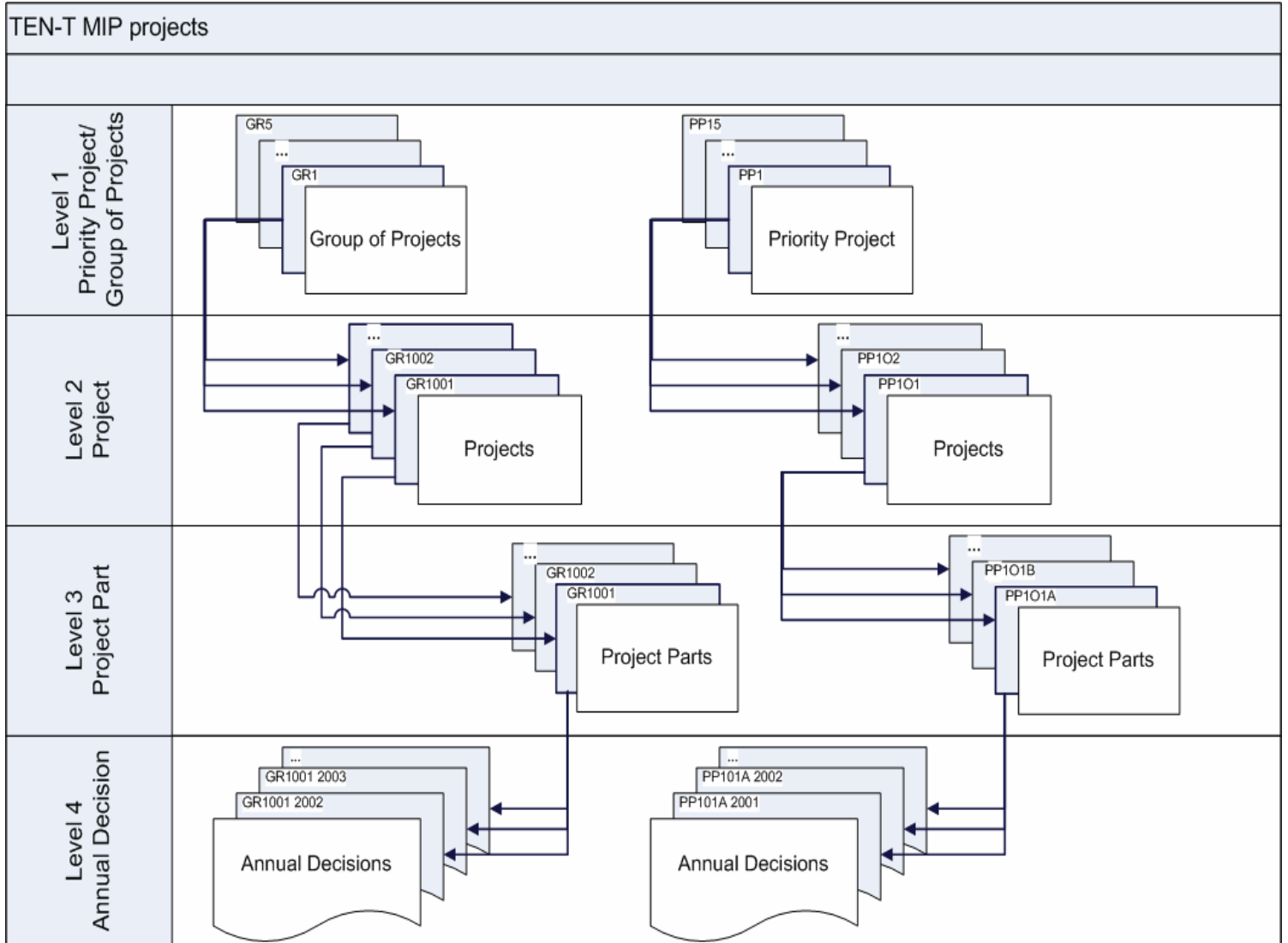
3.2.1. OVERALL STRUCTURE AND RELATIONSHIPS

We present here the general structure of the database (corresponding to the project structure), the organisation of the tables and the existing relationships. Actual data content is discussed in 5.2.2 where the different fields are clarified.

3.2.1.1. OVERALL STRUCTURE

As pointed out higher, one of the major advantages of the database is the fact that there are several levels build within the structure. It is therefore possible to analyse information at the highest level, per priority project / project group (level 1 in the following graph), as well as on the most detailed level, for each annual financial decision individually (level 4 in the following graph). Moreover, the time dimension has been taken into account so that analysis of one Project Part, Project or Priority Project / Group of Projects can be done by year, from 2001 to 2006 (totals and summaries can be made per year for each level of detail).

Table 18 – Structure of the database

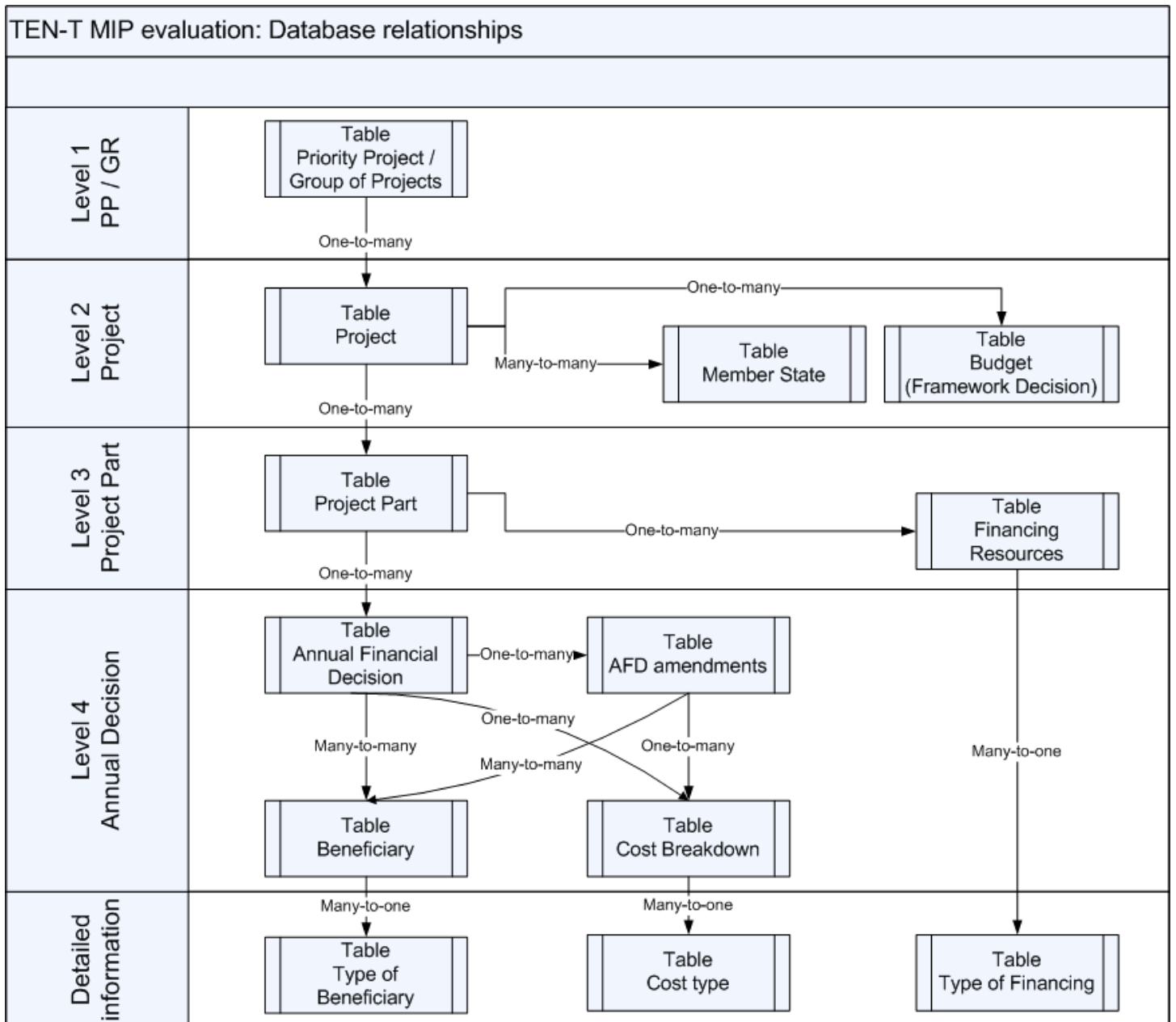


All Priority Projects (Essen Projects), within scope, are defined on the same level as a Group of Projects (level 1 in the graph). The next level is more detailed and points out each project individually (as they are defined in the framework decision). Level 3 contains all project parts (also defined in the framework decision). Whenever a project is not subdivided into different parts, it is seen as if the project is divided into only one project part (e.g. PP201 is subdivided into PP201A, PP201B, etc., however GR1001 is not subdivided in different parts yet, so only one project part is defined which is named GR1001). This construction makes it possible to add additional project parts later on, to projects which are not subdivided yet whenever it should be needed. Finally the lowest level contains the individual annual financial decisions. This brings us up to the level on which projects are defined in the Commission database (PMS).

3.2.1.2. RELATIONSHIPS IN THE DATABASE

The following graphs display the relationships between the different tables and specify the type of relationships (one-to-many, many-to-one, many-to-many).

Table 19 – Database relationships



- “Priority Project” table to “Project” table (level 1 to level 2)

The type of relationship is one-to-many because every priority project or project group (e.g. PP 1 or GR3) is divided in different Projects (PP101, PP102, PP103, GR3002, GR3003...). One Project, on the other hand, can not be part of more than one priority project.

- “Project” table to “Budget” table (level 2)

The budget provided in the annex I of the Framework Decision is defined at priority project / group of projects and project levels. Given the fact that a relational database stores one information at only one place and, preferably, at the most disaggregated level, the “budget” table has been related with the “project” table. This one-to-many relationship stands for the fact that every project can have more than one budget. Different budgets for each project consist in the initial budget from the framework decision in 2001, the revised budget from the revision in 2004 and (if changed) the revision in 2005.

- “Project” table to “Member State” (level 2)

This table is added to the database to be able to summarize all gathered information sorted by Member State. The many-to-many relationship is due to the fact that a Project can take place in more than one Member State on one hand. On the other hand, one Member State can host more than one Project as well.

- “Project” table to “Project part” table (level 2 to level 3)

The type of relationship is one-to-many because every Project (e.g. PP 201) is divided in different project parts (e.g. PP201A, PP201B ...). One project part, on the other hand, can not be part of more than one project.

- “Project part” table and “Financing resources” (level 3)

The one-to-many link between these two tables is based upon the fact that there can be more than one financing resource mobilised to support the project part. One record in the *project* table can be related to several records in *financing resource* table (one for each type of financing resource). Moreover, every link between a certain type of financing and a project part is defined in the database as unique. In addition the amount supported by this financing resource is given in the *Financing resources* table.

- “project-part” table to the “Annual Financial Decision” table (level 3 to level 4)

Again this is a one-to-many relationship. There can be several decisions for one project part, but we can breakdown each AFD, on project part level. For example for PP201A will have several decisions (maximum one a year). But these AFD’s discuss the financing decision for PP201A only (and not the decision for any other project part although certain information can be repeated on more than one decision).

- “Annual Financial Decision” table to the “Beneficiary” table (level 4)

One AFD can have more than one beneficiary (in a cross-border project for example) and one beneficiary can be involved in more than one AFD at a time (government of the member state can support various projects in their country). Hence, the relation between the *AFD* and the *Beneficiary* table is a many-to-many relationship.

As this a many-to-many relationship, it is needed to implement a junction table (named *Beneficiary linked to AFD*). In the junction table, each beneficiary (specified in the *Beneficiary* table) is linked to several AFD’s and vice versa, each AFD can be linked to various beneficiaries. However, the table is defined so that the combination AFD ID and beneficiary ID is forced to be unique. This prevents entering the same beneficiary twice for a certain AFD with the same function.

All many-to-many links between tables in the MS Access database are constructed in the same way (with an intermediate so-called ‘junction table’).

- “Annual Financial Decision” table and “Cost breakdown” table (level 4)

In each AFD, various costs are specified for the project phase at both external and internal level. As there is more than one possible cost type included in one specific AFD, these tables are linked with a one-to-many relationship.

- “Annual Financial Decision” table to the “AFD amendments” table

This one-to-many relationship regards to the fact that an annual financial decision can be amended more than once. However one amendment can be split up in a way that it only contains amended information for one financial decision. All relationships with “Beneficiary” table and “Cost Breakdown” table, are similar to those between the normal AFD and these tables, because anything that is stated on an AFD can be modified in on amendment.

- “Type of beneficiary” table, “Type of financing” table, and “Cost type” table (level 4 to detail)

These three tables provide a more convenient way to define a drop down list with possibilities to choose from in the tables they are linked with. As such, there is in fact no deeper logic behind these relationships.

3.2.2. DESCRIPTION OF FIELDS – DATA CONTENT OF THE DATABASE

Data input, consultation and modification is facilitated by forms in the Database. Hereunder we will discuss the kind of information that can be encoded and consulted, this accompanied by print screens of the forms. The forms are constructed with the same hierarchy framework as pointed out in 5.2.1. and they are designed to encode information into the database.

Note that it is possible that there are more fields defined in the different tables than that there are shown in the different forms. These fields are created during the test phase or implementing phase, but it is not yet decided whether they will be useful for the evaluation analysis. Until a final decision has been made regarding this information, these fields will not be deleted in consideration of not losing the information they contain too soon.

3.2.2.1. “PRIORITY PROJECT / GROUP OF PROJECTS” LEVEL INFORMATION

One record stands for one project, e.g. PP1, GR3 ... (level 1 in graph in section 5.2.1.1 and 5.2.1.2)

Table 20 – Database: Priority project / Group of projects form

The screenshot shows a web form interface with the following elements:

- Title:** F Priority Project / Group Projects
- Logo:** Deloitte.
- Fields:**
 - PP or GR ID:** Text input field containing "GR1".
 - PP or GR Name:** Text input field containing "Removal of bottlenecks on the railway network to improve freight and passenger traffic".
 - Classification:** Dropdown menu with "GR project" selected.
 - Transport Modality:** Empty text input field.
 - General Information:** A large empty text area.
- Help Text:**
 - Official priority project / group project ID, e.g. PP1, GR3, ...
 - Official priority project / group project name
 - PP or GR
 - Modality Confirmed by G. Pace
- Buttons:**
 - Open Project
 - Add New Project Group / Priority Project
 - Delete this Priority Project / Project Group
 - close form
- Record Indicator:** Record: 1 of 19

The field PP or GR ID stands for the official ID given by the European Commission. In the “Priority Project/ Group of Projects” table this field is used as primary key because it should be unique, only 1 record per project should be allowed in the database.

Furthermore, the transport modality is defined on a PP or GR level with the various possibilities as stated in the terms of reference. Following possibilities are configured in the database: "conventional rail"; "high speed rail"; "combined transport"; "road"; "inland waterways"; "sea ports"; "multimodal airports"; "traffic management on rail"; "traffic management on road"; "traffic management on maritime transport"; "traffic management on air transport"; "traffic management on GNSS".

3.2.2.2. “PROJECT” LEVEL INFORMATION

- Information directly related to the project

One record stands for one -project, e.g. PP 101, PP 304 ... (level 2)

Project ID and name are also here, the official ones given by the Commission. With the field “nature of the action” a project can be divided in categories like: "bottleneck"; "missing link"; "cross-natural barriers"; "cross-border with more than one beneficiary"; "infrastructure"; "traffic management system" according to the specifications. This will allow retrieving queries in which projects and information aggregated up to the level of projects can be grouped by this nature.

All projects included in the sample that is to be evaluated in the ex-post evaluation of the TEN-T MIP are indicated at this level. However as already stated in the terms of reference, the information encoded in the database has a broader scope than the present evaluation, nevertheless this field with the ‘in sample’ indication can be used to retrieve queries and reports specific for evaluation purposes.

Table 21 – Database: Project form

- Information regarding to the budget (framework decision and revisions)

In this table, one record stands for the budgeted amount of a project (e.g. PP 203) in a certain year. In other words, for each project there will be 6 records (one for each year between 2001 and 2006) with the budgeted amount stated three times (budget in the framework decision of 2001, in the first revision of 2004 and in the second revision of 2005).

Table 22 – Budget Table

Field Name	Data Type	Description
Budget ID	AutoNumber	
Project ID	Text	source: "sub-project" table
budgetted year	Text	source: Framework Decision in question
initial budget (€)	Currency	source: first Framework Decision 2001
first revision (€)	Currency	new budget after the first revision, source: revised Framework Decision 2004 (initial budget before 2004)
second revision (€)	Currency	new budget after second revision, source: revised Framework Decision 2005 (initial budget before 2004)

As this information has been entered all at once in database based upon the framework decision, there has not been made a form for this. Modifications to this kind of data are being made with a new, revised framework decision, so there is no need to adapt the current data in the database via a form. (If a new revision is needed to be entered, a new field could be created in the budget table.) Consulting

the information about the various (revised) budgets has been made possible through a report which will be discussed below.

3.2.2.3. “PROJECT PART” LEVEL INFORMATION

One record stands for one project part, e.g. PP 101 A, PP 201 C... (level 3)

The project part name in the database will be the official name of the project part, as it is written in the AFD. Furthermore a field is foreseen for additional information about the project, should this be needed.

Table 23 – Database: Project Part form

Within this form, there has been a sub form created to enter all different types of financial resources. Regarding to one project part several types of financing resource can be defined together with the concerning amount and a specific year. For one project part, several records can be created, each for a different type of financing resources.

A new type of financing (not yet defined) can easily be added by clicking on the “*create new type of financing*” button. For the moment being, following possibilities are already defined in the database: bank loan, EIB, European Structural Funds, Member State and private funds. All these types of financing resources are stored in the table with the name “type of financing”, which you can find in the lowest level of detail in the graph in 5.2.1.2.

3.2.2.4. “ANNUAL FINANCIAL DECISION (AFD)” LEVEL INFORMATION

One record of this table stands for one Annual Financial Decision (level 4)

Within the *project part* form, there is a sub form embedded to enter information on an AFD level (which you can see in the print screen below). In the first 3 tabs, information is captured that can be found on the actual paper decision, the last one contains information that can be found on other documents but which are stored in the database on the AFD level.

- General

A considerable amount of fields of the AFD table behind this form has been filled with the downloaded information from the existing PMS database. Again the ID (official acronym) will be used to identify each decision. The fields “start date” and “end date” indicate the eligible period as it is

stated on the original AFD, regardless of the actual end date. (If a date has been amended, this will be recorded in the amendment form and table.)

The *type of financial support* field contains the way of financing this project part, the number of possibilities is limited to: "Direct Grant"; "Guaranty on loan"; "Interest Subsidy"; "Co-financing a study" (as it is as such limited on the AFD form).

In this part of the form, the possibility to add one (or more) amendments to the AFD is embedded. If one clicks on the button *open AFD amendment form*, a similar form (than the AFD form) will be opened. In this form, the purpose is to only enter the information that has been changed by the particular amendment. The information will be automatically linked to the AFD record that was shown in the original AFD form. With this functionality, the possibility has been created, to compare and analyse amendments that needed to be made to the original financial decisions. (This without losing track of what was original decided and what was the final decision in place.)

Table 24 – Database: AFD form

The screenshot displays a web-based form titled "Project part" with the Deloitte logo in the top right corner. The form is divided into several sections:

- Project part header:** Contains fields for "Project part ID" (GR1001), "Project part name" (Schienenverbindung Donauachse: Bau der Umfahrung Enns und des Knotens Rohr), "Project ID" (GR1001), and "Project part explanation".
- Annual Financial Decision AFD:** This section is active and contains:
 - "Official Acronym": 2005-AT-1001-P
 - "Year of decision": 2005
 - "Information on AFD":
 - "Official Acronym": 2005-AT-1001-P
 - "Project / Study": Project
 - "Start date eligible period": 1/01/2005
 - "End date eligible period": 31/12/2006
 - "Type of Financing support": Direct grant
 - "Awarded amount (€)": 7.650.000,00 €
 - "Title of the AFD (PMS)": Schienenverbindung Donauachse: bau der Umfahrung Enns und des Knotens Rohr
 - A button labeled "Open AFD amendment Form" with the text "To add an amendment to this AFD" above it.
 - A checkbox labeled "AFD is amended" which is currently unchecked.
- Navigation and Action Buttons:**
 - "Add New AFD to this Project Part" and "Delete this AFD" buttons are located below the AFD section.
 - "Add New Project Part" and "Delete this Project Part" buttons are located at the bottom of the form.
 - A "close form" button is in the bottom right corner.
- Record Navigation:** The bottom of the form shows "Record: 1 of 4" and "Record: 1 of 141".

- Beneficiary

Shown hereunder are all beneficiaries linked on the AFD, with their function in the project part during the eligible period. Only the *authority responsible for implementation* and the actual *beneficiary of aid* are encoded in the database since the owner of the bank account was deemed to be not of any use for evaluation purposes.

Table 25 – Database: Beneficiary subform

All beneficiaries mentioned on the AFD are defined on this level with the form you can see on the previous print screen. The detailed information on each beneficiary (which is linked with a many-to-many relationship with the AFD table) is entered via a separate form that pops up when clicking on the *create new Beneficiary* button and then scrolling through the records. Available fields to define a beneficiary are: name, Member State, address, city, zip code and type (possible types here are limited to: international organisation, Member State administration, private undertaking, public undertaking

- Cost Breakdown

Regarding to the cost breakdown, it was opted to classify all cost with a ISIC structure (revision 3.1). All costs mentioned in the AFD will be classified with this system. In addition following information is also requested for each cost type: whether it is an internal or external cost, whether the costs are direct or indirect (keeping in mind that indirect costs are by definition not eligible). Furthermore the amount and the actual description (mentioned on the decision itself) of the cost are encoded in this form.

The field called *explicit* is added to this form to ease the encoding and reviewing of this information. Whenever this indicator is put on “yes”, this means that there is no doubt possible on in which category the cost needs to be stored. At the end a query can be retrieved with costs that can be classified wrongly in a certain ISIC category, this list can be review by the responsible in question.

In this form, the same system of making a new cost type is used as in the beneficiary form to create a new record in the beneficiary table. The required information to define a cost type is limited to the ISIC code and description of the activity.

Table 26 – Database: Cost Breakdown subform

Annual Financial Decision AFD Official Acronym 2006-ES/FR-306A-S

General Beneficiary **Cost Breakdown** Other Documents

Cost Breakdown

cost type ISIC code refresh Internal/External Explicit: amount (€) Direct/Indirect

Cost type other information

7411	Legal activities	External costs	No	2.000.000,00 €	Direct
	<i>Conseillers juridiques 2.000.000</i>				
7414	Business and management consultancy activities	External costs	No	2.400.000,00 €	Direct
	<i>Conseillers techniques ingénierie 2.400.000</i>				
7421	Architectural and engineering activities and related technical consultancy	External costs	No	100.000,00 €	Direct
	<i>Etudes complémentaires superstructures 100.000</i>				
		Internal costs	No	100.000,00 €	Indirect
	<i>Soutien sur une base forfaitaire : Oui/Non 100.000</i>				

Create new Cost type Refresh Add other Cost to this AFD Delete this Record

Record: 1 of 4

Add New AFD to this Project Part Delete this AFD

Record: 25 of 453

- Other documents

In this section of the AFD form, all information is captured, that is mentioned on other documents than on the actual decision.

Table 27 – Database: Other information in AFD form

Annual Financial Decision AFD Official Acronym: 2002-EU-5001-S

General Beneficiary Cost Breakdown **Other Documents**

Payment Information

Amount of initial payment (€)	3.850.000,00 €	Date of initial payment	18/02/2003
Amount of interim payment (€)	0,00 €	Date of intermediary payment	
Amount of final payment (€)	3.758.341,85 €	Date of final payment	27/09/2004

Final Payment Authorisation

Actual total costs (€): 15.216.683,70 € Total costs audited: Yes

Appraisal for continuing action Appraisal for NEW actions: Yes

Assess the progress achieved during eligible period against the original targets as set out in annex I of the AFD (In line with target/ Below target/ Above target)

Progress achieved against original targets: In line with target

Payments made in relation to original cost forecast for the eligible period (More than 100%/ Between 70 and 100%/ Between 50 and 70%/ Less than 50%)

Payment vs original cost forecast: Between 70% and 100%

Commitments made in relation to original cost forecast (More than 100%/ Between 70 and 100%/ Between 50 and 70%/ Less than 50%)

Commitments vs original forecast: Between 70% and 100%

Add New AFD to this Project Part Delete this AFD

Record: 119 of 453

On the AFD level the deliverables (as they are stated in the PMS database) are included in this form, except for the technical report information. Regarding to payment information, 6 different fields were added. First we have the date and amount of the initial payment (1) and the date and amount of the final payment (2) for every decision on a project part level. In addition the table includes the possibility to introduce information related to the interim payment (3) if there should be one. The latter one is not mandatory, so those fields can be left open (as you can see in the example in the print screen above.)

The actual total costs (stated in the final payment authorisation) is encoded to allow making a comparison between budgeted and actual costs. If the final payment authorisation was not yet available in the paper file but the total eligible costs was already mentioned in the paper file by the Commission (before the financial audit has been finalised), we added this number in the total actual costs field but indicated the fact that these mentioned costs were not yet audited.

Last there are some progress indicators from the “appraisal for continuing action” added on the AFD level, more specifically about the general progress of the project part, about the commitments and the payment progress. Whenever this information was to our disposal in an electronic form, this was already inputted in the DB.

4. ANNEX 4 – BIBLIOGRAPHY

Only national document are listed in this section.

#	Country	Project	Title
1	IE	All	National Roads Project Management - Guidelines
2	IE	All road projects	National Road Authority 2006 Annual report and programme for 2007
3	IE	All	National Development Plan 2000-2006 Economic and Social Infrastructure Operational Programme Revised complement December 2005
4	IE	PP1301	A1/N1 Newry Dundalk Link Road office of the Project Manager Progress report N° 18 1st May 2007
5	IE	PP901	Assessment of the Impact of completed projectsc(TEN T) Railway axis Cork - Dublin - Belfast - Stanraer Report on the cross border Rail investmnet (Dublin - Belfast)
6	ES	All	PEIT Strategic Infrastructures and Transport Plan (2005 - 2020)
7	FIN	All PP and GR	MIP 2001- 2006 Finnish Rail Administration (31/05/2006)
8	FIN	PP1205	Presentation on the direct line from Kerava to Lahti We are building a direct line
9	FIN	All	Brochure on the Nordic Triangle Development Programme for the Transport System in Finland
10	FIN	All	The Finnish railways statistics 2006
11	FIN	Rail project	Finnish Rail Administration Annual report 2006
12	FIN	PP1204	European Road E18 in Finland Develoment Study April 1995
13	FIN	PP1204	Development of European E18 in Finland Situation in 1999
14	FIN	All road projects	Road Facts 2006
15	FIN	PP1204	Transport System of the Nordic Triangle Develoment Strategy for the Road E18

#	Country	Project	Title
16	FIN	PP1204	PPT presentation on the Finnish Road Administration including figures on MIP projects.
17	FIN	All	Guidelines for the Assessment of Transport Infrastructure Projects in Finland 2003
18	DK	GR3009	Economic and Financial Evaluation of a Fixed Link across the Fehmarn-Belt
19	DE	GR3009	Investigation of socio-economic and regional consequences of a fixed link across the Fehmarn Belt Summary
20	NL	PP201	Facts and Figures HSL Zuid
21	NL	PP201	Werk in Uitvoering: Hoofddorp-Rotterdam
22	NL	PP201	Werk in Uitvoering: Rotterdam - Belgische grens
23	NL	GR1201	Deelnota - Verkeer en Vervoer in de corridor Amsterdam-Utrecht
24	IT	All	Conto Nazionale dei Trasporti e delle Infrastrutture
25	AT	PP103	The Lower INN Valley Railways
26	AT	PP103	Die Neue Unterinntalbahn
27	AT	GR3001	Manual on Danube Navigation
28	UK	PP1401	West Coast Main Line Strategy June 2003
29	UK	PP1401	West Coast Main Line Progress Report April 2004
30	UK	PP1401	The Modernisation of the West Coast Main Line
31	UK	PP202	Channel Tunnel Rail Link - At a Glance
32	UK	PP1401	West Coast Main Line - Progress Report May 2006
33	AT	PP103	Cost Benefit Analysis New Lower Inn Valley Railway Line
34	LU	GR1020	Umweltverträglichkeitsuntersuchung (UVU) zum Bau und zum Betrieb des neuen Viadukt Pulvermühle der CFL in Luxemburg Stadt (2004)
35	LU	GR1020	Schiennenverkehrsstrategie "mobilitéit.lu": Pulvermühle-Viadukt (Modul K3) (2007)
36	AT	GR1001	UVP Umfahrung Enns (1999)
37	AT	GR3001	Kosten-Nutzen-Betrachtung zum Nationalen Aktionsplan Donauschifffahrt (2006)

#	Country	Project	Title
38	AT	GR3001	National Action Plan Danube navigation Overview of measures (May 2006)
39	AT	PP103	BEG UVE nichttechnische Zusammenfassung (1997)
40	NL	PP201	Crossborder contract NL BE (1999)
41	NL	ALL Rail projects	Economische Impact Studie Railgoederenvervoer (2002)
42	NL	PP201	Voortgangsrapport 20 Hogesnelheidslijn-Zuid (2007)
43	NL	PP201	Nederlands deel hogesnelheidsspoorverbinding Amsterdam - Brussel - Parijs/Londen Nieuwe HSL-Nota (1994)
44	NL	PP201	Riskmanagement vergaderjaar 2006 2007 Nederlands deel van een hogesnelheidsspoorverbinding Amsterdam-Brussel-Parijs en Utrecht-Arnhem-Duitse gren
45	NL	PP201	Nederlands deel hogesnelheidsspoorverbinding Amsterdam-Brussel-Parijs/Londen Nieuwe HSL-Nota Tracénota NoordHSL-tracés Rotterdam-Amsterdam (1994)
46	NL	PP201	Nieuwe HSL-Nota Tracénota Zuid: HSL-tracés Rotterdam - Belgische grens (1994)
47	NL	PP501	Eindrapport commissie betuwe route (1995)
48	NL	PP501	Kostenontwikkeling Betuweroute (1995)
49	NL	PP501	Rentabiliteitsstudie Betuweroute - kort verslag.pdf
50	NL	PP501	Sporen naar een nationaal project (1998)
51	NL	PP501	Evaluatie van het bronbeleid geluid spoor in het kader van de PKB Betuweroute (2004)
52	NL	PP501	Betuweroute Voortgangsrapportage 21 (2006)
53	PT	NAER	Executive summary Rio Frio environmental impact
54	PT	NAER	Ota économie locale et régionale
55	PT	NAER	Ota Executive summary
56	PT	NAER	Ota résumé non technique

#	Country	Project	Title
57	PT	NAER	Ota synthèse de validation des impacts, recommandations et mesures d'atténuation
58	PT	NAER	Pondération de son renvoi à travers l'expansion de Portela
59	PT	NAER	Présentation des résultats du benchmark avec les autres aéroports internationaux
60	PT	NAER	Rapport de la consultation publique environnementale
61	PT	NAER	Rapport pour la préparation du choix du local - partie 1
62	PT	NAER	Rapport pour la préparation du choix du local - parti 2
63	PT	NAER	Rio Frio économie locale et régionale
64	PT	NAER	Rio Frio executive summary
65	PT	NAER	Rio Frio résumé non technique
66	PT	NAER	Rio Frio Synthèse et recommandations
67	UK	PP1401	TV4 Risk Register
68	UK	PP1302	Cost Statement A120
69	UK	PP1302	A120 Environmental Statement
70	UK	PP1302	Another Road to Essex
71	NL	PP201	Voortgansrapport 20 HSL Zuid
72	DK	GR3009	Trafikministeriet Femer Baelt Fordindelsen Økonomiske undersøgelser August 1999
73	DK	GR3009	Fehmarn-Belt fixed link Financial Analysis March 2003
74	DK	GR3009	Regional Effects of a Fixed Fehmarn Belt Link Final Report FEB 2006
75	DK	GR3009	Construction of a Fixed Link across the Fehmarn-Belt Preliminary risk assessment on birds
76	DK	GR3009	Economy-wide benefits Dynamic and strategic effect of a Fixed Link across the Fehmarn-Belt
77	DK	GR3009	Financial Analysis, Traffic Forecast and Analysis of Railway Payment
78	DK	GR3009	Fixed Link across the Fehmarn-Belt Financial Analysis June 2004
79	IE	All	Economic and Social Infrastructure Operational Programme 2003

#	Country	Project	Title
80	IE	All	Economic and Social Infrastructure Operational Programme (ESIOP) Update Evaluation 2005
81	IE	All	Economic and Social Infrastructure Operational Programme Progress Report on Programme Implementation to end June 2006
82	ES	PP306	Rentabilidad economica de la nueva linea de alta velocidad Figueres - Perpignan
83	FR	PP604	Dossier Delle Alternative analisi Costi Benefici (April 2007)
84	FR	PP604	LTF Avant-Projet de référence Synthèse des études juridiques et financières (décembre 2006)
85	FR	PP604	LTF Avant-Projet de référence Méthode d'évaluation des péages d'infrastructure (avril 2007)
86	FR	PP604	LTF Avant-Projet de référence Péage application de la stratégie RFF-RFI (mars 2007)
87	FR	PP604	LTF Avant-Projet de référence Bilan économique de l'autoroute ferroviaire (mai 2007)
88	SV	PP1202	Citybanan i Stockholm July 2002
89	DE	All	Bundesverkehrswegeplan 2003, Grundlagen fuer die Mobilitaet in Deutschland, 2003
90	DE	All	Bericht zum Ausbau der Schienenwege 2006, Bundesministerium fuer Verkehr, Bau und Stadtentwicklung
91	DE	All	Bericht zum Ausbau der Schienenwege 2005, Bundesministerium fuer Verkehr, Bau und Stadtentwicklung
92	DE	All	Bericht zum Ausbau der Schienenwege 2001, Bundesministerium fuer Verkehr, Bau und Stadtentwicklung
93	DE	All	Public Private Partnership Projekte, Kurzfassung, Deutsches Institut fuer Urbanistik, September 2005

#	Country	Project	Title
94	DE	All	Investitionsrahmenplan bis 2010 fuer die Verkehrsinfrastruktur des Bundes, Bundesministerium fuer Verkehr, Bau und Stadtentwicklung, 2007
95	DE	All	Die gesamtwirtschaftliche Bewertungsmethodik, Bundesverkehrswegeplan, 2003, Bundesministerium fuer Verkehr, Bau und Stadtentwicklung
96	DE	All	Bewertungsverfahren BVWP, Ergaenzungen Schiene, Teil IIIa, Bundesministerium fuer Verkehr, Bau und Stadtentwicklung, 2003
97	DE	All	Antwort der Bundesregierung auf die Kleine Anfrage der Abgeordneten Horst Friedrich (Bayreuth), Jan Mücke, Patrick Döring, weiterer Abgeordneter und der Fraktion der FDP Drucksache 16/610 –, 2006
98	DE	All	Public Private Partnerships (PPP) für Schieneninfrastruktur: Potenziale, wirtschaftliche Vorteilhaftigkeit, Gestaltungsoptionen, Umsetzungshemmnisse und Handlungsbedarf, BBG & Partner/kcw/pspc, 2007
99	DE	All	Gesetz über den Ausbau der Schienenwege des Bundes (Bundesschienenwegeausbaugesetz) BSWAG, 15.11.1993
100	DE	All	Erste Aenderung des Bundesschienenwegeausbaugesetzes, 2004
101	DE	All	Ergaenzung zur Programmplanung zur Umsetzung des Operationellen Programms Verkehrsinfrastruktur, Deutschland Ziel 1, 2007, Bundesministerium fuer Verkehr, Bau und Stadtentwicklung
102	DE	PP402	Schnellbahnverbindung – Paris – Ostfrankreich – Suedwestdeutschland, Ergaenzungsbericht der deutsch-franzoesischen Arbeitsgruppe 1991
103	BE	PP204	Investing in the new century: Toward an undistorted appraisal process, Dr. Rana Roy, The Railway Forum, 2006
104	BE	PP204	Loi portant assentiment au Traité entre le Royaume de Belgique et le Royaume des Pays-Bas concernant la construction d'une liaison ferroviaire pour trains à grande vitesse entre Rotterdam et Anvers, signé à Bruxelles le 21 décembre 1996, MONITEUR BELGE — 07.05.1999

#	Country	Project	Title
105	IT	All	PRINCIPALI INVESTIMENTI DI RFI IN LOMBARDIA Un'articolata serie di interventi sulle linee della regione e sul Nodo di Milano. Il piano di investimenti di RFI, la società dell'infrastruttura del Gruppo Ferrovie dello Stato, è pari a circa 8.095 milioni di euro, di cui 6.410 per l'Alta Velocità/Alta Capacità. Milano, 5 maggio 2003
106	IT	All	IHK München setzt sich für den Ausbau der Bahn-Hochleistungsstrecke München – Verona mit einem Brenner-Basistunnel ein Le infrastrutture ferroviarie del Nord Est, RFI
107	IT	All	Nuovo Collegamento ferroviario transalpino linea Torino-Lyon dal confine di stato a settimo torinese destra dora Relazione generale del tracciato , ITALFERR
108	IT	All	Bilancio TAV 2006
109	IT	All	Bilancio TAV 2005
110	IT	All	Contratto di Programma 2001-2005: Il Piano di Priorità degli Investimenti Aggiornamento 2004, Allegato A, I numeri dei progetti, April 2004
111	IT	GR1019	Nodo di Roma, TAV/RFI, 2005

5. ANNEX 5 – INDIVIDUAL PROJECT RESULTS

Annex 5 is the project database delivered in a CD-ROM attached to the final report.

6. ANNEX 6: BACKGROUND INFORMATION ON EUROPEAN TRANSPORT

6.1. Evolution of the European transport sector over the MIP period

The TEN-T and the MIP present clear objectives in relation to transport in Europe. Consequently, it is of interest to analyse the way the European transport network evolved since the implementation of the MIP in 2001.

6.1.1. GENERAL DATA

Freight transport in the EU-25 grew on average by 2.8% per year over 1995-2005 period, thereby surpassing average growth in GDP (at constant prices) of 2.3%. This trend is quite similar over 2001-2005 period. Passenger transport increased by a slower rate of 1.8% between 1995 and 2004, which is also true over 2001-2004 period (*see Figure 1*).

Road transport is today predominant over other modes of transport, with a market share of 84% for passenger transport (when passenger cars, powered two-wheelers and coaches are taken together) (*see Tables 1 and 2*) and of 70% for the transportation of goods (*see Tables 3 and 4*). In freight, road haulage recorded the fastest growth (+3.3% per year). Road infrastructure experienced the most significant evolution, and especially motorways which grew by 24% in length between 1995 and 2004 (*see Table 5*).

Railway length in the EU-25 declined between 1995 and 2004 by close to 6% (*see Table 5*). This decline in railway line length in the EU-25 was the net result mainly of decreases in the three largest networks in Germany (-15%), Poland (-15%), and France (-8%) (*see Table 6*). However, aided in recent years by the TEN-T, the length of dedicated high-speed railway line networks doubled between 1995 and 2006 (9% per year) to reach a total of 4,845 km in the EU-25 (*see Table 7*). This growth was even more significant over 2001-2006 period with an increase of 12% per year.

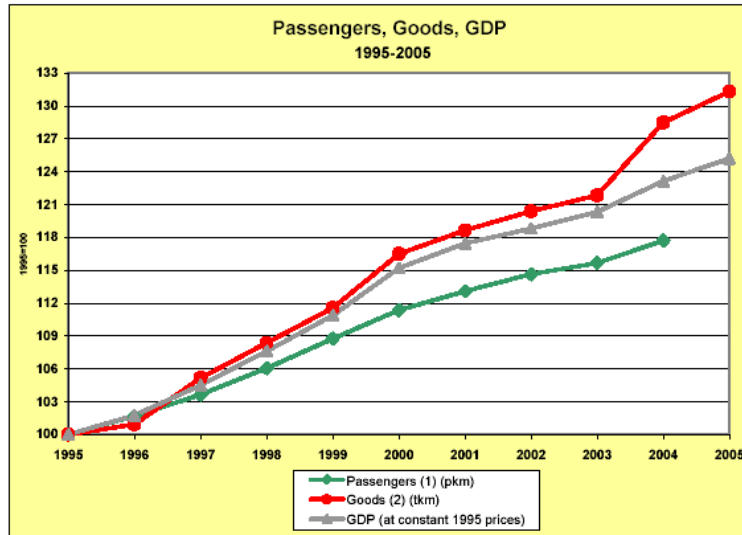
Air transport, which represents 8% of passenger transport, has made the most progress (+49% between 1995 and 2005). This is related to the fact that the sector was opened up to competition in the Nineties. This trend has strengthened recently with the development of low-cost airlines. *Table 8* provides an overview of the number of main airports¹ in each Member State and furthermore shows those individual airports that, together, are responsible for at least 80% of a country's total traffic (both national and international).

Although freight performance over inland waterways only increased by 10% in the EU-25, rates of growth were much larger in certain Member States (50% in Belgium and 30% in France). Moreover, even if inland waterways currently only have a market share of 5% for goods, they have nonetheless avoided any major decline over the last decade; they continue to have considerable potential for shifting the balance between modes of transport. The inland waterways network recorded relative stability. The only significant growth was in Finland (31%) which possesses the longest network with 8,018 km (*see Table 9*).

¹ Airports handling at least 150 000 passengers per year.

Figure 1: Transport growth EU-25

Transport Growth EU-25



Source: Eurostat, national statistics, DG Energy and Transport

Table 28: Passenger transport EU-25 performance by mode

**Passenger Transport
EU-25 Performance by Mode**

1000 mio passenger-kilometres

	Road (*)	Railway	Tram & Metro	Air	Sea	Total
2004	5 103	352	75	482	49	6 061
2003	5 032	347	73	454	49	5 956
2002	4 995	351	72	435	50	5 903
2001	4 905	355	71	441	50	5 823
2000	4 820	353	71	440	49	5 734
1999	4 734	339	69	408	50	5 600
1998	4 631	329	67	381	52	5 461
1997	4 529	326	66	363	53	5 337
1996	4 452	322	65	341	55	5 235
1995	4 381	324	65	324	55	5 149
1995 -2004	16.48%	8.60%	16.40%	48.80%	-11.10%	17.70%
per year	1.8%	0.90%	1.70%	4.50%	-1.30%	1.80%
2001-2004	4.04%	-0.85%	5.63%	9.30%	-2.00%	4.09%
per year	1.35%	-0.28%	1.88%	3.10%	-0.67%	1.36%

(*) Including passenger cars, powered 2-wheelers, bus and coach

Source: Eurostat

Table 29 : Modal split

Modal split

(%)

	Road (*)	Railway	Tram & Metro	Air	Sea
2004	84.2	5.8	1.2	8.0	0.8
2003	84.5	5.8	1.2	7.6	0.8
2002	84.6	5.9	1.2	7.4	0.8
2001	84.2	6.1	1.2	7.6	0.9
2000	84.1	6.2	1.2	7.7	0.9
1999	84.5	6.1	1.2	7.3	0.9
1998	84.8	6.0	1.2	7.0	1.0
1997	84.9	6.1	1.2	6.8	1.0
1996	85.0	6.2	1.2	6.5	1.1
1995	85.1	6.3	1.3	6.3	1.1
1995 - 2004	-0.9	-0.5	0.0	1.7	-0.3
per year	-0.1	-0.1	0.0	0.2	0.0
2001 - 2004	0.0	-0.3	0.0	0.4	-0.1
per year	0.0	-0.1	0.0	0.1	0.0

(* Including passenger cars, powered 2-wheelers, bus and coach)

Source: Eurostat

Table 30: Freight transport for inland modes EU-25 performance by mode

Freight Transport for Inland Modes

EU-25 Performance by Mode

1000 mio tonne-kilometres

	Road	Rail	Inland waterways	Pipelines	Total
2005	1 724	392	129	131	2 376
2004	1 683	392	129	129	2 333
2003	1 573	364	119	128	2 184
2002	1 560	358	128	126	2 172
2001	1 518	359	129	130	2 136
2000	1 487	374	130	124	2 115
1999	1 439	358	124	122	2 043
1998	1 382	370	125	123	2 000
1997	1 314	380	121	116	1 931
1996	1 268	360	114	116	1 858
1995	1 250	358	117	112	1 837
1995 - 2005	37.90%	9.20%	10.20%	17.50%	29.30%
per year	3.30%	0.90%	1.00%	1.60%	2.60%
2001 - 2005	13.57%	9.19%	0.00%	0.77%	11.24%
per year	3.39%	2.30%	0.00%	0.19%	2.81%

Source: Eurostat

Table 31: Modal split

Modal split
(%)

	Road	Rail	Inland waterways	Pipelines
2005	72.6	16.5	5.4	5.5
2004	72.1	16.8	5.5	5.5
2003	72.0	16.7	5.4	5.9
2002	71.8	16.5	5.9	5.8
2001	71.1	16.8	6.0	6.1
2000	70.3	17.7	6.1	5.9
1999	70.4	17.5	6.1	6.0
1998	69.1	18.5	6.2	6.1
1997	68.1	19.7	6.3	6.0
1996	68.2	19.4	6.1	6.3
1995	68.0	19.5	6.4	6.1
1995 - 2005	4.6	-3.0	-1.0	-0.6
per year	0.5	-0.3	-0.1	-0.1
2001 - 2005	1.5	-0.3	-0.6	-0.6
per year	0.4	-0.1	-0.2	-0.2

Source: Eurostat

Table 32 : Evolution of main transport networks, EU-25

Evolution of main transport networks, EU-25
Length of network in km

	Motorways	Railway lines	Inland waterways
2004	58 998	197 937	37 142
2003	57 881	200 375	37 026
2002	56 700	198 766	37 322
2001	55 735	198 222	37 371
2000	54 358	201 303	37 653
1999	53 426	202 998	37 431
1998	51 847	206 602	37 517
1997	49 964	207 275	36 232
1996	48 663	209 710	36 024
1995	47 579	211 215	36 379
1995 -2004	24.00%	-6.29%	2.10%
per year	2.67%	-0.70%	0.23%
2001-2004	5.85%	-0.14%	-0.61%
per year	1.95%	-0.05%	-0.20%

Source: Eurostat

Table 33 : Length of lines

Railways : Length of Lines

	km													
	1970	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
EU25	230 650	222 741	215 441	211 215	209 710	207 275	206 602	202 998	201 303	198 222	198 766	200 375	197 937	EU25
EU15	175 274	168 150	161 638	159 506	158 567	156 286	155 729	152 526	151 227	150 970	151 096	152 261	150 213	EU15
BE	4 605	3 971	3 479	3 368	3 380	3 422	3 470	3 472	3 471	3 454	3 518	3 521	3 536	BE
CZ	-	-	-	9 430	9 430	9 430	9 430	9 444	9 444	9 523	9 600	9 602	9 612	CZ
DK	2 352	2 015	2 344	2 349	2 349	2 232	2 264	2 324	2 047	2 047	2 273	2 779	2 785	DK
DE	43 777	42 765	40 981	41 718	40 826	38 450	38 126	37 525	36 588	35 986	35 814	36 054	34 732	DE
EE	1 227	993	1 026	1 021	1 021	966	966	968	968	967	967	967	971	EE
EL	2 602	2 461	2 484	2 474	2 474	2 503	2 299	2 299	2 385	2 377	2 383	2 414	2 449	EL
ES	15 850	15 724	14 539	14 291	14 294	14 294	14 284	14 310	13 868	13 868	13 856	14 387	14 395	ES
FR	37 582	34 362	34 070	31 939	31 852	31 821	31 735	29 113	29 272	29 445	29 352	29 269	29 246	FR
IE	2 189	1 987	1 944	1 954	1 954	1 945	1 909	1 909	1 919	1 919	1 919	1 919	1 919	IE
IT	16 073	16 138	16 066	16 003	16 014	16 030	16 080	16 092	16 187	16 357	16 307	16 287	16 236	IT
CY	-	-	-	-	-	-	-	-	-	-	-	-	-	CY
LV	2 606	2 384	2 397	2 413	2 413	2 413	2 413	2 413	2 331	2 305	2 270	2 270	2 270	LV
LT	2 015	2 008	2 007	2 002	1 997	1 998	1 998	1 905	1 905	1 896	1 775	1 774	1 782	LT
LU	271	270	271	275	274	274	274	274	274	274	274	275	275	LU
HU	8 487	7 836	7 838	7 988	7 988	7 988	7 988	7 988	8 005	7 736	7 949	7 950	7 950	HU
MT	-	-	-	-	-	-	-	-	-	-	-	-	-	MT
NL	3 147	2 880	2 798	2 739	2 739	2 805	2 808	2 808	2 802	2 809	2 806	2 811	2 811	NL
AT	5 901	5 857	5 624	5 672	5 672	5 672	5 643	5 643	5 665	5 697	5 779	5 787	5 675	AT
PL	26 678	27 181	26 228	23 996	23 420	23 328	23 210	22 891	22 560	20 134	20 223	20 665	20 250	PL
PT	3 588	3 609	3 064	2 850	2 850	2 856	2 794	2 813	2 814	2 814	2 818	2 818	2 849	PT
SI	1 055	1 058	1 196	1 201	1 201	1 201	1 201	1 201	1 201	1 229	1 229	1 229	1 229	SI
SK	-	-	-	3 668	3 673	3 665	3 667	3 662	3 662	3 662	3 657	3 657	3 660	SK
FI	5 804	6 075	5 867	5 880	5 859	5 865	5 867	5 836	5 854	5 850	5 850	5 851	5 741	FI
SE	12 203	12 006	11 193	10 925	10 984	10 941	10 997	11 044	11 037	11 021	11 095	11 037	11 050	SE
UK	19 330	18 030	16 914	17 069	17 066	17 178	17 179	17 064	17 044	17 052	17 052	17 052	16 514	UK
BG	4 196	4 341	4 299	4 294	4 294	4 292	4 090	4 090	4 320	4 320	4 318	4 316	4 259	BG
RO	11 012	11 110	11 348	11 376	11 385	11 380	11 364	11 364	11 364	11 364	11 364	10 939	10 844	RO
HR	2 411	2 437	2 429	2 296	2 726	2 726	2 726	2 726	2 726	2 726	2 726	2 726	2 726	HR
MK	-	873	696	699	699	699	699	699	699	699	699	699	699	MK
TR	7 985	8 387	8 429	8 549	8 607	8 607	8 607	8 682	8 671	8 671	8 671	8 697	8 697	TR
IS	-	-	-	-	-	-	-	-	-	-	-	-	-	IS
NO	4 242	4 242	4 044	4 023	4 021	4 021	4 006	4 179	4 179	4 178	4 077	4 077	4 077	NO
CH	3 161	3 178	3 215	3 232	3 234	3 184	3 151	3 143	3 216	3 225	3 222	3 231	3 381	CH

Source: Eurostat

Table 34 : Railways: High speed rail network

Railways : High Speed Rail Network

Length of lines or of sections of lines on which trains can go faster than 250

km/h at some point during the journey

km at end of year

	BE	DE	ES	FR	IT	EU*
2006	120	1 291	1 225	1 573	562	4 845
2005	120	1 202	1 043	1 573	468	4 480
2004	120	1 202	1 021	1 573	248	4 238
2003	120	875	1 021	1 573	248	3 911
2002	120	833	471	1 573	248	3 245
2001	58	636	471	1 573	248	2 986
2000	58	636	471	1 278	248	2 691
1999	58	636	471	1 278	248	2 691
1998	58	636	471	1 278	248	2 691
1997	-	447	471	1 278	248	2 444
1996	-	447	471	1 278	248	2 444
1995	-	447	471	1 220	248	2 386
1995-2006	-	-188.81%	160.08%	28.93%	126.61%	103.06%
per year	-	-17.16%	14.55%	2.63%	11.51%	9.37%
2001-2006	106.90%	102.99%	160.08%	0.00%	126.61%	62.26%
per year	21.38%	20.60%	32.02%	0.00%	25.32%	12.45%

*: Also in operation: UK: 74 km (since 2003)

Source: Eurostat

Table 35 : Air infrastructure

Table 2.7 Main airports* together handling at least 80 %** of the country's total passenger traffic, 2004			
Belgium (4 main airports)	Rank	France (39)	Rank
Bruxelles/National	1	Paris/Charles-De-Gaulle	1
Bulgaria (3)	Rank	Paris/Orly	6
Sofia	1	Nice/Cote D'azur	3
Burgas	6	Lyon/Satolas	4
Varna	3	Marseille/Marignane	5
Czech Republic (2)	Rank	Toulouse/Blagnac	6
Praha/Ruzyně	1	Bordeaux/Mérignac	7
Denmark (6)	Rank	Italy (30)	Rank
København/Kastrup	1	Roma/Fiumicino	1
Germany (25)	Rank	Milano/Malpensa	6
Frankfurt/Main	1	Milano/Linate	3
München	6	Venezia/Tessera	4
Düsseldorf	3	Catania/Fontanarossa	5
Berlin/Tegele	4	Napoli/Capodichino	6
Hamburg	5	Palermo/Punta Raisi	7
Stuttgart	6	Bergamo/Orio Al Serio	8
Köln/Bonn	7	Torino/Caselle	9
Estonia (1)	Rank	Bologna/Borgo Panigale	10
Tallinn/Ulemiste	1	Villafraanca (Military)	11
Ireland (6)	Rank	Cyprus (2)	Rank
Dublin	1	Larnaka	1
Cork	6	Pafos	6
Greece (18)	Rank	Latvia (1)	Rank
Athens	1	Riga	1
Iraklion	6	Lithuania (1)	Rank
Thessaloniki	3	Vilnius Intl	1
Rodos	4	Luxembourg (1)	Rank
Kerkyra	5	Luxembourg Findel	1
Kos	6	Hungary (1)	Rank
Spain (32)	Rank	Budapest/Ferihegy	1
Madrid/Barajas	1	Malta (1)	Rank
Barcelona	6	Malta/Luqa	1
Palma De Mallorca	3	The Netherlands (4)	Rank
Malaga	4	Amsterdam Schiphol	1
Las Palmas/Gran Canaria	5	Austria (6)	Rank
Alicante	6	Wien/Schwechat	1
Tenerife Sur/Reina Sofia	7	Salzburg	6
Arrecife/Lanzarote	8	Poland (6)	Rank
Ibiza	9	Warszawa/Okecie	1
Puerto Del Rosario/ Fuerteventura	10	Krakow/Balice	6
		Katowice/Pyrzowice	3
		Portugal (8)	Rank
		Lisboa	1
		Faro	6
		Porto	3
		Madeira	4
		Romania	Rank
		Bucaresti/Otopeni	1
		Timisoara/Giamata	6
		Slovenia (1)	Rank
		Ljubjana	1
		Slovakia (2)	Rank
		Bratislava	1
		Finland (11)	Rank
		Helsinki-Vantaa	1
		Oulu	6
		Tampere-Pirkkala	3
		Sweden (18)	Rank
		Stockholm/Arlanda	1
		Goteborg/Landvetter	6
		Malmö/Sturup	3
		Stockholm/Skavsta	4
		Stockholm/Bromma	5
		United Kingdom (31)	Rank
		London/Heathrow	1
		London/Gatwick	6
		Manchester/Int'l	3
		London/Stansted	4
		Birmingham	5
		Glasgow	6
		Edinburgh	7
		London/Luton	8
		Turkey (14)	Rank
		Istanbul/Ataturk	1
		Antalya	6
		Ankara/Esenboga	3
		Izmir/Adnan Menderes	4
		Mugla/Dalaman	5
		Iceland (3)	Rank
		Keflavik	1
		Reykjavik Ad	6
		Norway (16)	Rank
		Oslo/Gardermoen	1
		Bergen/Flesland	6
		Trondheim/Vaernes	3
		Stavanger/Sola	4
		Tromsø	5
		Bodo	6
		Switzerland (3)	Rank
		Zurich	1
		Geneve/Coirtrin	6

Source: Eurostat (Transport)

Source: Eurostat

Table 36 : Inland waterways

		Inland Waterways														
		Length in use (Navigable canals, rivers and lakes regularly used for transport)														
		km														
		1970	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004		
EU25					36 379	36 024	36 232	37 517	37 431	37 653	37 371	37 322	37 026	37 142	EU25	
EU15		32 338	30 620	29 474	28 928	28 741	29 149	30 447	30 360	30 571	30 123	30 249		EU15		
BE		1 553	1 510	1 515	1 540	1 540	1 540	1 534	1 534	1 532	1 532	1 532	1 532	1 532	BE	
CZ					677	677	677	664	664	664	664	664	664	664	CZ	
DK		-	-	-	-	-	-	-	-	-	-	-	-	-	DK	
DE		6 808	6 697	6 669	6 663	6 760	6 673	6 740	6 754	6 754	6 687	6 642	6 636	6 636	DE	
EE					520	520	320	320	320	320	320	320	320	320	EE	
EL		6	6	6	6	6	6	6	6	6	6	6	6	6	EL	
ES		70	70	70	70	70	70	70	70	70	70	70	70	70	ES	
FR		7 433	6 568	6 197	5 962	5 678	6 051	5 732	5 576	5 789	5 378	5 637	5 384	5 372	FR	
IE		-	-	-	-	-	-	-	-	-	-	-	-	-	IE	
IT		2 337	2 337	1 366	1 466	1 466	1 463	1 477	1 477	1 477	1 477	1 477	1 477	1 477	IT	
CY		-	-	-	-	-	-	-	-	-	-	-	-	-	CY	
LV					347	360	360	360	360	360	360	360	360	360	LV	
LT					369	369	369	369	369	380	436	477	425	425	LT	
LU		37	37	37	37	37	37	37	37	37	37	37	37	37	LU	
HU					1 373	1 373	1 373	1 373	1 373	1 373	1 484	1 440	1 440	1 439	HU	
MT		-	-	-	-	-	-	-	-	-	-	-	-	-	MT	
NL		5 599	4 843	5 046	5 046	5 046	5 046	5 046	5 046	5 046	5 046	5 046	5 046	5 046	NL	
AT		350	350	351	351	351	351	351	351	351	351	351	351	351	AT	
PL					3 997	3 980	3 812	3 812	3 812	3 813	3 813	3 640	3 643	3 638	PL	
PT		124	124	124	124	124	124	124	124	124	124	124	124	124	PT	
SI		-	-	-	-	-	-	-	-	-	-	-	-	-	SI	
SK					172	172	172	172	172	172	172	172	172	172	SK	
FI		6 000	6 057	6 072	6 120	6 120	6 245	7 787	7 842	7 842	7 872	7 872	7 884	8 018	FI	
SE		390	390	390	390	390	390	390	390	390	390	390	390	390	SE	
UK		1 631	1 631	1 631	1 153	1 153	1 153	1 153	1 153	1 153	1 153	1 065	1 065	1 065	UK	
BG					470	470	470	470	470	470	470	470	470	470	BG	
RO					1 782					1 779	1 779				RO	
HR															HR	
MK															MK	
TR															TR	
IS															IS	
NO															NO	
CH					1 217	1 208	1 214	1 214	1 236	1 244	1 244	1 244	1 244	1 239	CH	

Source: Eurostat

6.1.2. PERFORMANCE IN GOODS TRANSPORT

In *national freight transport*, road haulage was clearly the dominant transport mode in the modal share (restricted to road, rail and inland waterways). In 2005, road haulage accounted for 14.9 billion tonnes of national transport in the EU. By contrast, rail transport amounted to just 901 million tonnes, equal to over 6% of the volume forwarded by road. However, in terms of tonne-kilometres, there is a different ratio in which the rail freight share is 16% of the figure for of road freight (*see Table 10*). This can be explained by the fact that longer distances (in excess of 150 km) occur significantly more often in rail transport, accounting for 83% of the volume forwarded in rail transport (2001 data), compared with 66% in road transport and 67% in inland waterways (*see Figure 2*).

The high rail shares (in terms of tonne-kilometres) of rail freight in Poland (49%), the Czech Republic and Sweden (around 40%), Austria (33%), or even Germany (19%) show that rail transport is more popular where distances are greatest.

Inland waterway transport is significant in four Member States: Belgium, France, Germany, and the Netherlands. The reason is that these countries are located on or near the Rhine axis which is the biggest inland waterway network in the world. In terms of tonne-kilometre performance, Germany experienced the highest volumes. This can be explained by the size of its waterway network, which is one of the core arteries of the EU's waterway network, the Rhine and Danube axes.

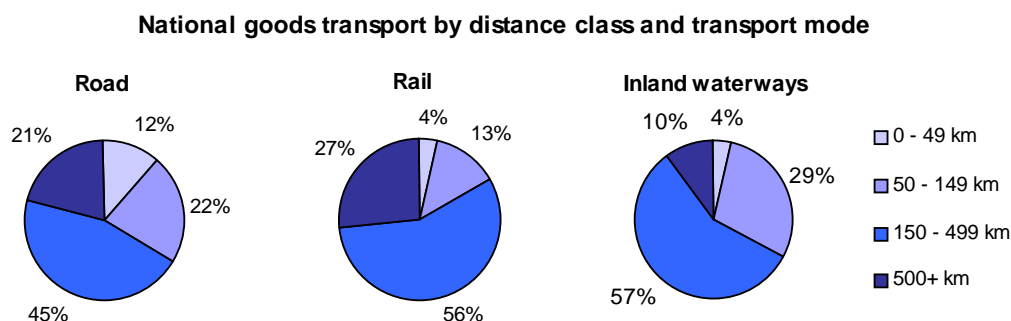
Table 37 : National transport of goods by country and mode, 1990-2005 (in million tonne-kilometres)

Table 5.5 National transport of goods by country and mode, 1990-2005* (in million tonne-kilometres)

	1990			2000			2004			2005		
	Road	Rail	Inland waterways	Road	Rail	Inland waterways	Road	Rail	Inland waterways	Road	Rail	Inland waterways
EU-25	:	:	:	:	:	:	1 178 776	194 018	31 415**	1 198 805	187 228	30 085**
BE	16 616	6 669	1 697	63 067	6 031	6 391	19 416	6 113	3 056	19 683	6 353	3 060
BG	:	:	:	:	:	:	:	:	40	:	:	67
CZ	:	:	:	14 616	:	37	16 046	6 166	66	15 518	6 606	30
DK	9 353	678	:	11 001	488	:	10 538	498	:	11 058	460	:
DE	160 167	33 096	14 111	617 048	35 039	13 351	636 303	39 936	11 696	637 617	44 416	11 695
EE	:	:	:	:	:	:	1 478	690	:	1 847	747	:
IE	3 876	589	:	8 361	:	:	13 616	398	:	13 983	303	:
EL	16 485	666	:	:	:	:	20 000	655	:	19 816	149	:
ES	97 659	8 750	:	106 933	9 587	:	155 014	9 687	:	166 386	9 060	:
FR	98 060	33 486	4 668	163 176	:	4 141	179 183	66 658	4 163	177 331	64 558	4 640
IT	115 784	9 089	118	158 646	11 789	:	158 176	11 616	:	171 587	16 061	:
CY	:	-	:	:	-	:	:	-	:	:	-	:
LV	:	:	:	:	:	:	6 380	6 661	:	6 734	6 367	:
LT	:	:	:	:	:	:	6 613	6 860	:	6 137	3 464	:
LU	:	113	1	415	:	0	549	79	:	494	68	:
HU	:	:	:	:	:	:	10 977	1 700	4	11 394	1 566	6
MT	:	-	:	:	-	:	:	-	:	:	-	:
NL	66 578	1 060	6 895	31 514	944	9 669	33 938	1 145	16 589	31 867	1 067	10 466
AT	:	:	:	9 686	3 888	117	16 376	4 606	33	16 514	4 085	37
PL	:	:	:	:	:	:	58 865	36 406	643	60 940	69 870	185
PT	10 978	1 683	:	14 131	:	:	17 435	1 931	:	17 445	6 131	:
RO	:	:	:	:	:	:	:	:	4 409	:	:	5 316
SI	:	:	:	:	:	:	6 667	646	:	6 361	660	:
SK	:	:	:	:	:	:	5 466	1 361	5	5 661	1 681	6
FI	:	:	:	67 718	6 806	:	67 331	7 197	:	67 815	6 607	:
SE	:	:	:	67 960	:	:	36 691	13 190	:	34 701	14 164	:
UK	136 967	16 078	:	191 896	:	:	154 157	61 639	:	154 396	19 964	:
NO	:	:	:	10 440	:	:	14 453	6 017	:	15 356	6 615	:

Source: Eurostat

Figure 2 : National goods transport by distance class and transport mode



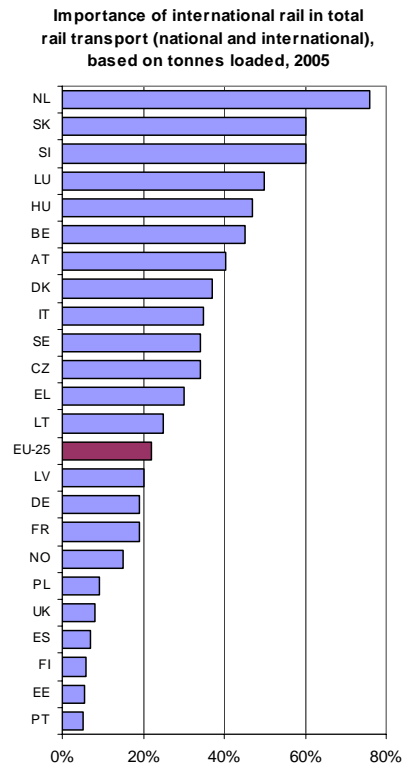
Source: Eurostat

The rail share of *international freight transport* was 22% in 2005 (see Figure 3). Although rail transport only accounts for a small share of total international transport at EU level, this mode is far more important for some Member States. The Member States displaying shares of more than 40% are the Netherlands (76%), Slovakia (60%), Slovenia (60%), Luxembourg (50%), Hungary (45%), Belgium (44%) and Austria (41%). Portugal recorded the lowest share (5%).

There are two countries where international rail performance exceeded that of road. In Sweden, international rail freight forwarded accounted for close to six times the volume transported by international road transport because of the 500 km long Ore Line. Hungary followed, with international rail freight volumes equivalent to 1.5 times the amount recorded for international road transport.

Between 2003 and 2005, average growth in international rail transport was about 6% at EU level (see Table 11). In the countries where international rail transport is the most significant, Germany (which is the biggest absolute international rail performer), Sweden and Italy recorded growth of 17%, 13% and 37% respectively. By contrast, among the larger countries geographically, there were decreases in Poland (-7%), the Czech Republic and France (both -10%). The biggest growth was recorded in the United Kingdom where the volume loaded in 2005 was 13 times that recorded in 2003, reflecting the growing importance of the Channel Tunnel.

Figure 3 : Importance of international rail in total rail transport (national and international)



Source: Eurostat

Table 38 : International rail transport, based on tonnes loaded, 2003-2005 (in 1000)

International rail transport, based on tonnes loaded, 2003-2005 (in 1000)				
	2003	2004	2005	% change 2003-2005
EU-25	242 681	237 630	257 666	6%
BE	19 776	-	19 651	-1%
CZ	22 692	20 456	20 523	-10%
DK	1 155	1 918	1 076	-7%
DE	41 254	46 063	48 220	17%
EE	1 448	1 390	1 445	0%
EL	-	281	313	11%
ES	2 342	2 665	1 773	-24%
FR	18 171	18 014	16 434	-10%
IE	-	-	-	-
IT	14 321	15 636	19 569	37%
LV	2 984	2 167	1 992	-33%
LT	7 053	5 002	5 480	-22%
LU	2 506	3 076	1 932	-23%
HU	9 808	11 189	11 377	16%
NL	17 263	18 922	17 800	3%
AT	18 438	18 604	18 715	2%
PL	23 703	23 219	22 085	-7%
PT	392	449	426	9%
SI	4 852	4 770	5 029	4%
SK	13 023	12 749	11 767	-10%
FI	1 382	1 612	1 512	9%
SE	17 981	19 458	20 248	13%
UK	656	8 859	9 023	1275%
LI	-	0	1	-
NO	1 481	1 131	1 275	-14%

Source: Eurostat

International inland navigation accounted for over 262 million tonnes of goods in 2005 (*see Table 12*). For some Member States, inland navigation is clearly an important mode of international transport, particularly in countries located on or near the Rhine axes (Germany, France and the Benelux) which generated 95% of EU inland shipping in 2005, with considerable loads being transhipped in large seaports such as Rotterdam, Antwerp or Hamburg. Austria, Hungary and Bulgaria also had non-negligible volumes, reflecting their location on the Danube axis which connects with the Rhine via the Rhine-Main-Danube canal and stretches as far as the Black Sea.

Between 2004 and 2005, international inland navigation transport grew by 5% in the EU. The most significant growth was recorded in Poland (52%). Germany, on the other hand, the largest forwarder (with a 39% share), registered a slight contraction (-2%), Belgium and the Netherlands, the second and third most important forwarders respectively, posted growth of 12% and 13% respectively.

Table 39 : International transport by inland waterways, based on tonnes unloaded, 1990-2005 (in 1000)

International transport by inland waterways, based on
tonnes unloaded, 1990-2005 (in 1000)

	1990	2000	2004	2005	% change 2004-2005
EU-25	-	-	250 124	262 566	5%
BE	46 673	53 354	66 610	74 839	12%
CZ	-	485	303	372	23%
DE	98 766	109 349	105 109	103 182	-2%
FR	12 151	12 692	14 394	14 312	-1%
LU	1 141	1 195	1 249	834	-33%
HU	-	-	1 859	1 525	-18%
NL	52 865	50 320	53 929	60 756	13%
AT	-	5 450	6 072	6 070	0%
PL	-	-	386	588	52%
SK	-	-	213	88	-59%
BG	-	-	3 033	2 944	-3%
RO	-	-	2 954	2 942	0%

Source: Eurostat

6.1.3. PERFORMANCE IN PASSENGER TRANSPORT

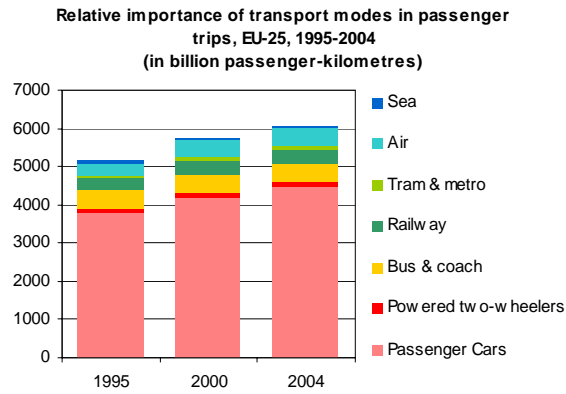
In 2004, passenger transport demand in the EU-25 (*see Figure 4*) was estimated to be over six thousand billion passenger-kilometres (pkm). This represented an increase of close to 18% over 1995 (5,149 billion pkm) and 6% on 2000 (5,733 billion pkm).

Passenger cars accounted for 73.5% of the passenger transport performed in 2004, buses and coaches 8.3%, air (intra-EU and domestic only) 8%, railways 5.8%, with the remaining shares accounted for by powered two-wheelers (2.4%) and trams and metros (1.2%) and sea (0.8%).

Of the 352 billion passenger-kilometres performed by railways in 2004, high-speed rail accounted for over a fifth of the total, at over 76 billion pkm. This was more than twice the 1995 figures of 33 billion pkm.

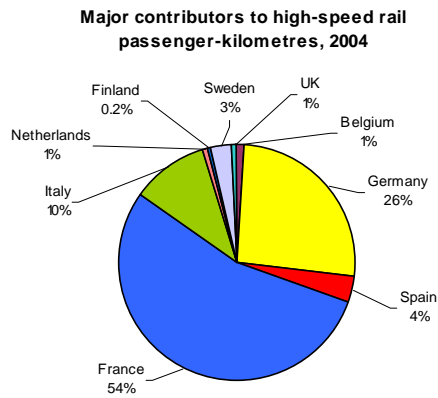
With a share of 54%, France was the largest contributor to the EU total (*see Figure 5*). In fact, high-speed rail accounted for 56% of France's total rail performance (*see Table 13*), generating 41.5 billion pkm, the highest ratio of the nine Member States with high-speed rail performance. Germany and Sweden followed with a high-speed rail share of 27% each.

Figure 4 : Relative importance of transport modes in passenger trips, EU-25, 1995-2004 (in billion passenger-kilometres)



Source: Eurostat

Figure 5 : Major contributors to high-speed rail passenger-kilometres, 2004



Source: Eurostat

Table 40 : Share of high speed rail transport in total passenger-kilometres in rail transport

Share of high speed rail transport in total passenger-kilometres in rail transport
%

	BE	DE	ES	FR	IT	NL	FI	SE	UK	EU25
2004	10.8	27.0	13.5	55.8	17.4	4.7	4.8	27.2	1.0	21.7
2003	10.6	24.5	12.0	55.2	16.4	1.5	6.0	26.5		20.3
2002	11.0	21.5	11.8	54.2	15.4	1.4	4.1	25.6		19.4
2001	11.1	20.5	11.6	52.3	14.5	1.3	1.8	25.5		18.4
2000	11.2	18.5	11.0	49.7	10.8	0.8	2.1	24.8		16.7

Source: Eurostat

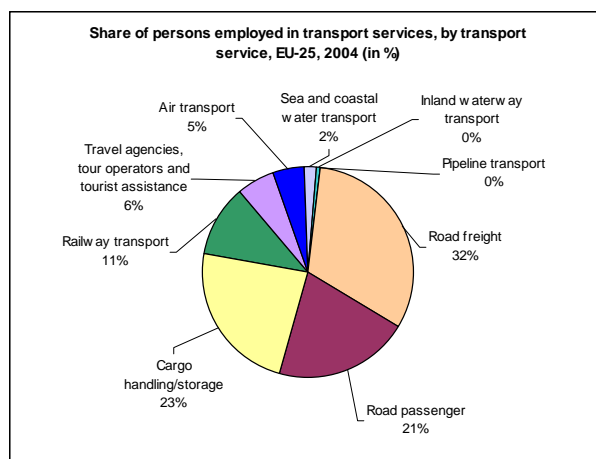
6.1.4. EMPLOYMENT

The transport services sector employs some 8.2 million people in the EU-25. Almost two thirds (64%) of them work in land transport (road, rail, inland waterways), 2% in sea transport, 5% in air transport and 29% in supporting and auxiliary transport activities (such as cargo handling, storage and warehousing, travel and transport agencies, tour operators). Road transport accounted for over half of employment (53%), making it the largest single employer by far (see Figure 6).

Looking at data for Member States (see Table 14), the largest are also the main contributors to employment: Germany (15%), France (14%), the United Kingdom (13%), Italy (11%) and Spain (10%).

The share of road transport reached around two thirds of employment in at least three Member States: Spain (65%), Lithuania and Poland (62% each). The lowest ratio was in Cyprus (26%). Within road transport, road freight accounted for nearly 32% of employment in the EU-25, making it the largest single sub-sector in transport services (see Figure 6). Shares reached as much as 44% in Spain and Slovenia, and around 39% in Luxembourg and Portugal (see Table 14).

Figure 6 : Share of persons employed in transport services, by transport service, EU-25, 2004 (in %)



Source: Eurostat

Table 41 : Employment by mode of transport, 2004

Employment by Mode of Transport										
2004										
	Total	Road		Sea transport	Air transport	Railways	Inland water transport	Pipe-lines	Travel agencies & tour operators	Other* auxiliary transport activities
		freight transport	passenger transport							
EU25	8 224 582	2 600 659	1 700 991	163 325	396 649	911 848	36 746	10 134	478 680	1 925 550
EU15	6 846 674	2 144 125	1 382 899	153 579	373 940	578 407	32 342	6 218	426 666	1 748 498
BE	192 352	63 172	32 949	565	4 928	40 000	778	370	7 977	41 713
CZ	277 355	102 569	47 732	0	5 340	78 500	816	673	13 253	28 472
DK	134 563	39 085	30 500	12 915	11 679	8 619	120	576	5 778	25 291
DE	1 238 001	284 527	288 945	17 875	53 002	82 627	8 803	498	61 373	440 351
EE	35 202	12 589	6 000	1 100	817	3 897	111	0	1 697	9 191
EL	200 000	50 000	65 000	15 950	15 000	8 900	50	100	15 000	30 000
ES	820 203	364 949	164 787	7 065	36 086	36 377	224	0	50 898	159 847
FR	1 125 487	346 082	214 329	13 185	72 210	176 000	3 488	1 027	41 249	257 957
IE	62 642	16 175	9 131	5 550	5 500	5 656	50	0	5 472	15 108
IT	935 659	331 597	144 522	21 711	24 900	69 164	2 813	2 970	43 363	294 919
CY	18 237	2 559	2 141	3 502	2 530	0	0	0	2 584	4 921
LV	65 504	14 161	15 213	627	739	15 401	15	386	1 647	17 315
LT	75 755	27 716	19 384	1 677	980	11 500	134	407	1 958	11 999
LU	18 739	7 411	2 205	32	3 247	3 194	40	0	669	1 941
HU	212 273	69 065	55 038	22	4 076	52 776	1 304	562	6 014	23 416
MT	10 385	811	1 473	734	2 279	0	0	0	1 771	3 317
NL	341 566	119 179	55 019	17 500	23 023	22 750	12 213	138	22 670	69 074
AT	199 211	58 572	44 013	13	8 435	46 931	337	108	12 187	28 615
PL	566 844	199 578	149 811	1 918	4 881	124 139	1 224	1 329	18 679	65 285
PT	150 361	58 565	36 700	802	8 851	4 953	917	46	8 276	31 251
SI	40 632	17 891	4 890	150	805	8 228	50	0	2 318	6 500
SK	75 721	9 595	16 410	16	862	39 000	750	559	2 093	6 836
FI	113 518	38 666	24 137	7 904	7 383	8 402	225	0	4 980	21 821
SE	222 458	67 233	57 227	15 937	14 243	8 556	1 090	0	12 052	46 120
UK	1 091 914	298 912	213 535	16 595	85 753	96 278	1 214	385	134 752	284 490
BG	161 788	45 000	46 788	5 000	2 143	21 000	1 135	280	5 501	34 941
RO	273 303	64 007	77 815	15 000	19 607	49 000	4 121	1 834	6 408	35 511

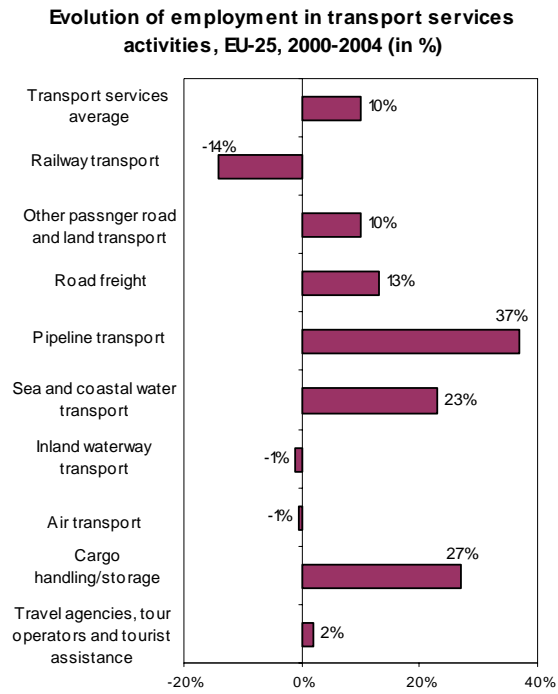
Source: Eurostat

Based on available data covering the 2000-2004 period only, employment in transport services went up by 10% over this period. As illustrated in *Figure 7*, the highest employment growth was recorded in the smallest transport services sector: pipeline transport (37%). It was followed by “Cargo handling/storage and other supporting transport activities” (27%).

Not all transport services recorded growth, however. Employment on the railways contracted by 14% and in inland waterway transport by 1%. Overall, employment declined by 0.5%.

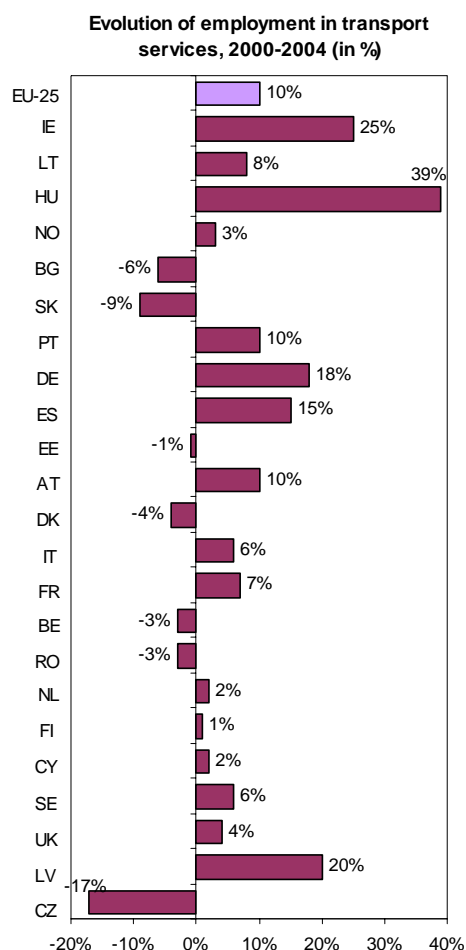
Comparing employment growth in the Member States, percentage changes went up to as much as 39% in Hungary and 25% in Ireland (*see Figure 8*). Among the main contributors to employment, Germany and Spain recorded growth of 18% and 15% respectively, significantly more than France (7%), Italy (6%) or the United Kingdom (4%).

Figure 7 : Evolution of employment in transport services activities, EU-25, 2000-2004 (in %)



Source: Eurostat

Figure 8: Evolution of employment in transport services, 2000-2004 (in %)



Source: Eurostat

6.1.5. SAFETY

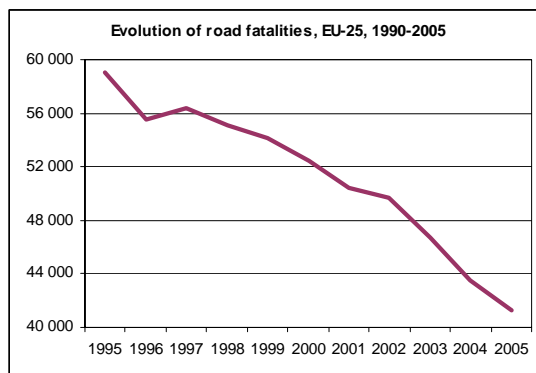
Based on available data, close to 43 000 lives were lost in traffic accidents in 2005 in the territory of the EU territory (road, rail and air traffic combined), with road accidents claiming the overwhelming majority (96%) of these.

As illustrated in *Figure 9*; the number of road fatalities in Europe declined almost 30% between 1995 and 2005. This result is encouraging when viewed against the simultaneous rise in road traffic over the same period. The reasons for the decline in deaths are, among others, safer cars and infrastructure, together with both stricter laws and a better perception of the risks connected with non-wearing of seat belts, speeding and drink-driving.

Table 15 shows that downward trends were evident in nearly all Member States. There were some exceptional cases of road fatalities increasing, e.g. Malta, where there was an increase of 21% which is not necessarily statistically significant given the small absolute numbers involved. It is also interesting to note that this downward trend is even more significant

over the period 2001-2005 (5% per year) than over the overall period 1995-2005 (3% per year).

Figure 9: Evolution of road fatalities, EU-25, 1990-2005



Source: Eurostat

Table 42 : Evolution of road fatalities

	1995	2001	2005	1995-2005		2001-2005	
				% change	% change per year	% change	% change per year
EU-25	58 997	50 437	41 274	-30%	-3%	-18%	-5%
EU-15	46 098	39 861	30 959	-33%	-3%	-22%	-6%
BE	1 449	1 486	1 089	-25%	-2%	-27%	-7%
CZ	1 588	1 334	1 286	-19%	-2%	-4%	-1%
DK	582	431	331	-43%	-4%	-23%	-6%
DE	9 454	6 977	5 361	-43%	-4%	-23%	-6%
EE	332	199	168	-49%	-5%	-16%	-4%
EL	2 412	1 880	1 614	-33%	-3%	-14%	-4%
ES	5 749	5 517	4 442	-23%	-2%	-19%	-5%
FR	8 892	8 162	5 339	-40%	-4%	-35%	-9%
IE	437	412	399	-9%	-1%	-3%	-1%
IT	7 020	6 691	5 426	-23%	-2%	-19%	-5%
CY	118	98	102	-14%	-1%	4%	1%
LV	611	558	442	-28%	-3%	-21%	-5%
LT	672	706	760	13%	1%	8%	2%
LU	70	70	46	-34%	-3%	-34%	-9%
HU	1 589	1 239	1 278	-20%	-2%	3%	1%
MT	14	16	17	21%	2%	6%	2%
NL	1 334	993	750	-44%	-4%	-24%	-6%
AT	1 210	958	768	-37%	-4%	-20%	-5%
PL	6 900	5 534	5 444	-21%	-2%	-2%	0%
PT	2 711	1 670	1 247	-54%	-5%	-25%	-6%
SI	415	278	258	-38%	-4%	-7%	-2%
SK	660	614	560	-15%	-2%	-9%	-2%
FI	441	433	371	-16%	-2%	-14%	-4%
SE	572	583	440	-23%	-2%	-25%	-6%
UK	3 765	3 598	3 336	-11%	-1%	-7%	-2%
BG	1 264	1 011	957	-24%	-2%	-5%	-1%
RO	2 845	2 461	2 641	-7%	-1%	7%	2%
HR	800	647	597	-25%	-3%	-8%	-2%
MK	-	107	143	-	-	34%	8%
TR	6 004	4 386	4 525	-25%	-2%	3%	1%
IS	24	24	19	-21%	-2%	-21%	-5%
NO	305	275	224	-27%	-3%	-19%	-5%
CH	692	544	409	-41%	-4%	-25%	-6%

Source: Eurostat

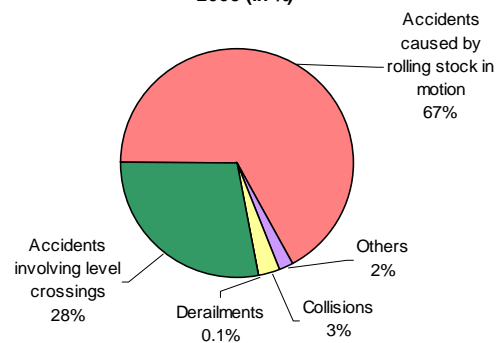
In rail travel, there were 1 464 fatalities (excluding suicides) due to railway accidents in 2005. This is a low figure nonetheless when compared with the road death toll. Of these mortalities, only 4% were passengers. As shown in *Figure 10*, of the total mortalities, 67%

were killed in accidents caused by rolling stock in motion (people trespassing and walking on the line, and a small fraction of employees carrying out maintenance work and in shunting procedures) and 28% in level-crossing accidents. Collisions accounted for only 3% and derailments for a minute share of 0.1%.

From the point of view of passenger safety, the number of passenger fatalities has generally tended to decrease over time. Between 2004 and 2005, they decreased by 25% from a total of 83 to 62. Of course, with such relatively small numbers, a single major accident can seriously influence statistical trends: this was the case, for example, in 1998 when the high-speed rail accident at Eschede in Germany, which claimed over 100 lives.

Figure 10 : Breakdown of rail accident mortalities by cause, EU-25, 2005 (in %)

Breakdown of rail accident mortalities by cause, EU-25, 2005 (in %)



Source: Eurostat