European Commission

DG TREN Contract
TREN/06/ADM/S07.67266 2006

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

Final Report –November 2007

Deloitte Consulting SCRL

Société coopérative à responsabilité limitée

Siège social: Avenue Louise 240, B-1050 Bruxelles

TVA BE 0474.429.572 - RPM Bruxelles - KBC 437-7505991-72

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

AFD	Annual Financial Decision
EIA	Environmental Impact Assessment
EP	European Parliament
GR	Coherent Group of Projects
ISC	Interservice Consultation
ISIC	International Standard Industrial Classification
MIP	Multi-annual Indicative Programme
MS	Member State
PMS	Project Management System
PP	Priority Project
PPP	Public-Private Partnerships
Pr	Project
PSR	Project Status Report
TEN-T	Trans-European Transport network
TEN-T FAC	TEN-T Financial Assistance Committee

Disclaimer

The views and comments expressed in this text are the responsibility of Deloitte and do not necessarily reflect the opinion of the European Commission.

Acknowledgements

This assignment was conducted by a team of Deloitte, headed by Richard Doherty and Luc Chalsège, and with the support of:

- *Gilles Devillers, Benoît Vandresse, Lydia Da Silva Gaspar, Liesbet Bonnarens, Marc Derycke, Stefaan De Corte from Deloitte,*
- *Amandine Stevens, Hugues Duchâteau from Stratec.*

The production of this report would not have been possible without the efforts of the many interviewees that we met during our fieldwork. The authors would like to express their gratitude to all of them.

Finally, the evaluation team would like to thank the many Commission officials who have been helpful and co-operative in providing information and feedback during the course of the assignment.

1. EXECUTIVE SUMMARY

The objective of this evaluation was to assist the European Commission in assessing the appropriateness and the effectiveness of the Multi-annual Indicative Programme (MIP) 2001-2006 in the context of the Trans-European Transport Networks (TEN-T).

The Report contains:

- an assessment of the policy context in which the Commission worked during this period;
- a presentation of our methodology;
- the findings of our analysis, presented according to the three main levels of assessment:
    - project level
    - management level
    - programme level
- conclusions and recommendations.

A comprehensive searchable database for DG TREN to use as a repository of data on the TEN-T and the MIP was also constructed and has been made available to the Commission for future use.

The evaluation did not aim at evaluating individual projects or the entire TEN-T initiative but to evaluate only the MIP at programme level as a policy tool, and as an innovation in the overall TEN-T process in terms of:

- Relevance
- Utility
- Sustainability
- Effectiveness
- Efficiency
- Impact

1.1. TEN-T priority projects and the MIP

In 2000 there were 14 TEN-T Priority Projects. They have target dates for completion of 2010 at the latest. Three are already complete, and several are already partially operational. They include road projects as well as more environmentally friendly projects. These projects can obtain funding of up to 50% from the MIP for preparatory studies and 10% for investment (20% since 2005 for cross-border projects).

The MIP was a break with the past in that it offered the possibility of multi-year funding. The funding decisions are still made annually, but the procedures were streamlined. It was also intended that the MIP should act as a catalyst for public-private partnerships, and that the system's new procedures would offer greater flexibility when projects hit technical, financial, legal or environmental obstacles.

1.2. Methodology

Qualitative and existing quantitative data were evaluated in particular from:

- a large and well structured consultation of the main parties involved in the MIP;
- existing data available at Member States level and/or at project level;

- key policy documents and studies[1];
- interviews with the stakeholders.

Theme A: Assessment at project level

48 of the 177 MIP projects co-financed during 2001-2006 and accounting for more than 50% of the funding were assessed. The performance of these projects was based on:

- the absorption rates of funding;
- the ratio of the support awarded to the total eligible cost.

These ratios are a proxy for the projects' performance. Overall, the projects best able to absorb the MIP funding were large, mature, high profile projects in new infrastructure. In general, these projects were already a national priority. Only thanks to these projects the objective to support the most sizable projects was essentially met.

Theme B: Assessment of the management of the TEN-T MIP

The evaluation of the effectiveness and efficiency of the MIP considered whether the procedures contributed to achieving the objective of the MIP in terms of support to achievement of the objectives of the TEN-T, and whether the MIP mechanisms for implementation were optimal and cost-efficient, in other words whether the same result have been achieved at less cost.

The procedures were considered under our headings:

- Programme Planning
- Project Selection
- Project Follow-up
- Financial Processes

In terms of *planning*, the MIP was intended to provide greater predictability over a period of six years. However, the fact that national planning cycles and systems vary meant that the MIP did not always fit well with Member State frameworks. The projects which fitted best were those which were so mature that they were no longer subject to political, technical or other delays. This created a paradox since the MIP was intended to leverage projects facing implementation obstacles. Where the MIP characteristically succeeded in that respect was in ensuring that the mature projects were implemented when others were facing budget cuts.

Once a project was successful in the *selection* process in 2001, it was assured of funding for the whole MIP period providing it went ahead. A revision in 2004 opened up the possibility for new application or for existing projects to obtain more funding following withdrawal from the list of projects. The selection process originally consisted of a preliminary application form followed by a detailed application form. In the 2004 revision, only the detailed application form was used.

The principal selection criteria were the degree of contribution to TEN-T objectives and European policies, economic viability, timing and maturity, impact on environmental and socio-economic development and financial need.

Ex post it is possible to say that the projects did comply with the criteria on contribution to TEN-T objectives and European policies, and on economic viability. However, insufficient information ex

[1] A bibliography is to be found in Annex 4.

ante is available to judge the selection process. Upfront environmental and socio-economic impact assessments were largely lacking or out-of-date. A number of the projects selected proved not to be mature enough to sustain their funding plans. In part, this appears to be attributable to the 'political' element and a prior negotiation process which preceded the formal application process. That process was positively valued by the beneficiaries.

Delays were created due to complexity in recovery of payments, amendments to annual financing decisions and a MIP revision.

Estimates show that 26 of 50 projects would have gone ahead without MIP funding so it is hard to judge whether the financial need criterion was met. The monitoring process consisted mainly of the project status report (PSR), a tool for technical and financial reporting that in the MIP has been used for releasing further funding and to trigger decision modification. Beneficiaries recognise the need for reporting, but expressed some dissatisfaction with the PSR format. Reasons included frequent changes, delays and problems with translations, differing reporting requirements for the MIP and the Structural Funds. From the Commission's point of view, the PSR was too focused on budgets and compliance with EU legislation and did not provide adequate information needed for monitoring technical contents and changes. Moreover, from the Commission management side, the PSR data cannot be automatically uploaded into the Project Management System (PMS) and remain practically without follow up.

The key *financial procedure* is the triggering of the payment. This procedure is highly control-oriented and often creates a dual workload in meeting the requirements of Member State reporting. The time Commission officials require to verify payments leaves them little time to look at the broader picture.

Management procedures were revised in 2004 to reflect new TEN-T guidelines, enlargement and experience with the MIP. The main impact was the redistribution of funds. More technical changes were less well understood because of problems in communicating the content of the Revision both at Commission and Member State level. Communication of procedural changes during the life of the MIP was generally an area which could have been improved, particularly had officials not needed to devote so much time to control procedures.

The MIP procedures turned out to be more complex than initially expected, but were nevertheless an advantage over the parallel non-MIP funding.

Theme C: Evaluation at programme level

At programme level, the evaluation dealt with effectiveness, relevance, impact, efficiency and sustainability.

Effectiveness took into account predictability of the MIP, the accountability of the beneficiaries, the extent to which the MIP promoted public-private partnerships and the degree of flexibility of the MIP in dealing with unforeseen technical or financial events.

By the end of the MIP period, only 10% of the projects had received exactly the initially planned amount. 32% received more and 58% received less. Those who received more did so because the system rewarded performance and/or because they were in a position to benefit from and were aware in time of the redistribution of funds at the 2004 Revision. For others, the lack of *predictability* lay as much with unforeseen problems with their projects than with the MIP.

However, the analysis of the time required for payments also threw up concerns about smoothness and timeliness of the payment flows and the impact this had on the *predictability* of non-MIP/TEN-T projects as Member States gave MIP projects priority for working capital in the interim.

The management procedures did not make accountability more effective and had no impact on the project decisions. On the contrary, they generally created a significant administrative burden.

The flexibility of the MIP was not well communicated. The fact that the MIP penalises under-performance was well grasped but the contrary for over-performers was not. The beneficiaries recognized the need for accountability; however, the procedures did not necessarily improve accountability. Technical issues and high staff turnover were the reasons.

In relation to Public-Private Partnership (PPP), the MIP did not play a relevant role. The MIP projects were almost without exception non-PPP. This can be explained by the fact that this type of large infrastructure project does not generally meet the criteria that will generate private sector investment. While MIP financing can signal to private investors that the public sector is committed to the project, it can also 'crowd out' alternative sources of financing, thus undermining the desired result of promoting PPP initiatives. But the analysis goes beyond the MIP and pointed out the absence in most Member States of a policy of encouraging PPP. More EC resources and a higher profile for PPP in selection criteria were needed.

In general, the political dimension of TEN-T and the signalling function of MIP funding act as a catalyst to implement projects at a faster rate.

Evaluating the *impact* of such long-term projects is intrinsically difficult. Many projects in the sample were already operational, but these 'projects' were in most cases just part of much vaster TEN-T schemes. The TEN-T objectives are broad and not always well defined and their full impact will only be realised when the full TEN-T network is operational.

The impacts are so far national, and are primarily on missing links between large cities and isolated regions, bottlenecks and upgrading infrastructure to speed up traffic flows. At a strategic level, the impact is mainly on the free movement of people and goods, traffic, cross-border/transnational cooperation, regional development and sustainable development.

Very little existing analysis of the MIP projects was made available in terms of net present value, cost-benefit ratios, internal rates of return of payback periods, making it difficult to draw conclusions about *efficiency*

1.3. Conclusions and Recommendations

The 2001-2006 MIP was effective, efficient and relevant in many respects. Predictability combined with flexibility were overriding success factors even if procedural issues cloud the picture. The value attached by beneficiaries to not losing the funding through underperformance meant that the MIP was a key factor in on-time implementation of these projects. The 2004 Revision was in some instances an additional performance incentive.

The downside was the tendency of mature projects with high national commitment to self-select. These were frequently projects which would often have proceeded in any event, though not necessarily quite as fast. We conclude that the Commission could reduce the rate of funding for such projects and still retain political leverage, while at the same time freeing funds for projects where the European interest is greater than the national interest. These are typically cross-border projects in the broadest sense of the word.

The MIP was not effective in achieving its objective of encouraging public-private partnerships. The instability of the management procedures over the life of the MIP affected the effectiveness, efficiency and relevance of the programme. Minimising the administrative burden and the need to demand accountability and transparency were controversial. These issues would have been less prominent if

more attention had been paid to communicating on them and on dialogue with beneficiaries. The 'control culture' left insufficient time for this.

As part of the streamlining of procedures, account should be taken of placing more emphasis on providing upfront indicators which will make it possible to evaluate impact ex post. It must be recognised that this will always be a challenge for individual MIP projects whose full benefit depends on completion of other projects, and often on the full implementation of the complete TEN-T project of which they are part. Ex post, we conclude that the MIP funds did go in the 2001-2006 period to projects which did have a socio-economic impact, particularly at national level. However, the Commission could play a greater role in ensuring that more attention is paid to this and also in developing basic indicators and criteria which will give it a much enhanced ability to compare different projects, and thus significantly improve its ability to be sure ex ante that it has selected the projects which will make the best use of the MIP funds.

Finally, the streamlining of the procedures can and should save time for desk officers of the TEN-T Agency to take a broader view of MIP projects, so that they have a better understanding of their context and their respective merit. Desk research and site visits should be regarded as an integral part of their work. All this is in the interest of improved project selection and dialogue with Member States and project promoters, and therefore of the TEN-T.

Main recommendations for maximising effectiveness, efficiency, relevance and impact of the MIP are the following:

<u>Objectives and funding rates</u>

- The primary objective of the MIP be to fund projects of high European interest, which will fill missing links or eliminate bottlenecks;
- the rate at which studies for projects of high European interest and low national interest is funded be increased;
- the rates at which investment projects are funded be modified, with projects of high European interest and low national commitment being eligible for grants of 30% and other projects be restricted to grants of 5% of total eligible cost;
- the TEN-T coordinators be asked to define which are the projects of high European interest and low national commitment.

<u>PPPs</u>

- Encouragement of Public-Private Partnerships (PPP) continue to be an objective, and;
- the European Commission collect and disseminate in a structured manner information on best practice in transport infrastructure PPP or other instruments designed in order to facilitate access to private sources of financing, such as the EIB loan guarantee or the risk capital facility;
- the financing rate be increased for studies on the suitability of investment projects for PPP;
- the financing rate be 30% for any project financed by a PPP.

<u>Procedures</u>

- A revision of the MIP Framework Decision in order to redistribute funds likely to be under-utilised be automatic after four years, and that any other revisions be announced six months in advance;
- the Commission further refine its work on the definition of concepts, using standard terminology and international classifications, and launch a consultation with Member States on a core set of standardised definitions for indicators, including net present value, cost-benefit analysis and internal rate of return;

- the Commission launch discussion on whether Member States could choose between annual and biannual instalments in order to provide greater flexibility and be better adapted to the range of planning processes which exists across the EU;
- the initial Framework Decision be flanked by an Annual Financial Decision in order to make a clear distinction between documents containing a general description of activities and those containing specific descriptions which are used to trigger payments;
- the application form, project appraisal forms and project status report forms be redesigned to incorporate information which will serve as a starting point for ex post evaluation;
- the Commission's Project Management System be upgraded to enable it to accept data from web-based forms, and to aggregate information from financial decisions.

Communication

- Clear communication of all procedural changes be regarded as a priority;
- time saved as a result of improved procedures be seen as an opportunity for desk officers to devote time to deepening their understanding of individual projects and of TEN-T's in general and to promote dialogue with Member States and project promoters.

2. INTRODUCTION

2.1. Introduction

This evaluation is intended to assist the European Commission to assess the appropriateness and the effectiveness of the Multi-annual Indicative Programme (MIP) 2001-2006 in the context of the Trans-European Transport Networks (TEN-T).

The evaluation study ran from late December 2006 to October 2007. This is the Final Report accompanied by a PowerPoint presentation of the main results of the study and an overview of the recommendations. This report also includes an Executive Summary.

This Report contains:

- an assessment of the policy context in which the Commission has been working (section 3);
- a presentation of the methodology we have followed (section 4);
- the findings of our analysis, presented according to the three main themes of the evaluation (section 5); and
- conclusions and recommendations (section 6).

The contract also required us to construct a comprehensive searchable database for DG TREN to use as a repository of data concerning the TEN-T and the MIP. This database naturally remains usable for the Commission in the future.

2.2. Purpose and expected contribution of the evaluation

The general objectives of the evaluation are summarised as follows:

- to assess the main descriptive elements of the Multi-annual Indicative Programme 2001-2006;
- to carry out an ex-post/final evaluation of the TEN-T MIP 2001-2006, establishing to what extent it has been able to stimulate the development of the TEN-T and to what extent it has contributed to the achievement of the TEN-T Guidelines' priorities, and in particular to promote the modal split to more environmental friendly transport modes, to improve interoperability, to give access to outlying areas, and to promote multi-modality;
- to appraise the chosen mechanisms of programme implementation - and the impacts of each relevant modification of procedures and priorities;
- to identify the Community added value of the programme at national and EU level;
- to identify lessons to be learned from the selection, design and implementation of the projects, in order to improve the next TEN-T Multi-annual Programme 2007-2013;
- to perform a final evaluation of the contribution of the TEN-T MIP to the completion of the 14 Essen projects, mainly in terms of effectiveness, efficiency, Community added value, impact at network level, management and implementation systems.

It is important to note that we have not sought to evaluate the projects or the overall TEN-T initiative as such. That work is carried out under other frameworks, and we have focused on the specific issues mentioned above, concentrating chiefly on the MIP as an innovation in the overall TEN-T process. We have benefited, nevertheless, from available relevant information, both descriptive and evaluative.

The evaluation covers three themes:

- **Theme A – Assessment at project level**: the evaluation focused on effectiveness, as well as on the relevance of the Community intervention. The emphasis was upon distilling from the project level output an overall understanding of the programme implementation and results;

- **Theme B – Assessment of the management of the TEN-T MIP**: at the programme management level, the evaluation concentrates on whether the systems, structure and procedures in place contributed to the effective and efficient implementation of the Programme. It also investigates the impact of various procedural changes introduced during the period under review;

- **Theme C – Evaluation at programme level**: finally, the relevance, utility, sustainability, effectiveness, efficiency and impact (development of the TEN-T and contribution to the objectives promoted by the Guidelines) of the programme have been evaluated.

2.3. Key features of the evaluation work

While section 4 below describes our methodology and approach in more detail, it is worthwhile noting some key points at this initial stage of the report:

- by spending significant effort in consulting with national- and project-level stakeholders and the managers of the projects, we gained valuable insight into the programme and its operational issues and;

- we used these insights to overcome the relative shortage and/or lack of comparability of data that exists at European level;

- we encouraged stakeholders to volunteer experiences and ideas regarding the management of the programme – and took both a "national government" and "operational project" perspective, by visiting many projects throughout the EU as well as holding structured consultations with Transport Ministry officials;

- we mobilised transport economists and experts to complement our core evaluation team, thereby ensuring that "traditional" evaluation skills were enriched with sector expertise;

- we sought to unearth the key differentiating effect brought by the MIP to the overall TEN-T process. This remained a leitmotiv throughout the evaluation.

3. THE TEN-T MIP - CONTEXT

3.1. The Trans-European Network Transport

The ***trans-European networks concept*** has existed since the Maastricht Treaty was signed in 1992 and entered into force in 1993. Under the terms of Chapter XV of the Treaty (Articles 154, 155 and 156), the European Union must aim to promote the development of Trans-European Networks as a key element for the creation of the Internal Market and the reinforcement of Economic and Social Cohesion. This development includes the interconnection and interoperability of national networks as well as the access to such networks.

Fourteen priority projects were identified by the Essen European Council and included in the first Decision of the European Parliament and of the Council on ***Community Guidelines for the development of the trans-European transport network***[2] (TEN-T) in 1996. This Guidelines Decision defined the TEN-T. According to this Decision, the objectives and priorities of the TEN-T are to:

a) Objectives

- ensure the sustainable mobility of persons and goods within an area without internal frontiers under the best possible social and safety conditions, while helping to achieve the Community's objectives, particularly in regard to the environment and competition, and contribute to strengthening economic and social cohesion;

- offer users high-quality infrastructure on acceptable economic terms;

- include all modes of transport, taking account of their comparative advantages;

- allow the optimal use of existing capacities;

- be, insofar as possible, interoperable within modes of transport and encourage intermodality between the different modes of transport;

- be, insofar as possible, economically viable;

- cover the whole territory of the Member States of the Community so as to facilitate access in general, link island, landlocked and peripheral regions to the central regions and interlink without bottlenecks the major conurbations and regions of the Community;

- be capable of being connected to the networks of the European Free Trade Association (EFTA) States, the countries of Central and Eastern Europe and the Mediterranean countries, while at the same time promoting interoperability and access to these networks, insofar as this proves to be in the Community's interest.

[2] "Decision 1692/96 on Community guidelines for the development of the trans-European transport network" as amended by Decision 1346/2001

b) Priorities

- establishment and development of the connections, key links and interconnections needed to eliminate bottlenecks, fill in missing sections and complete major routes;
- establishment and development of infrastructure for access to the network, making it possible to link island, landlocked and peripheral regions with the central regions of the Community;
- the optimum combination and integration of the various modes of transport;
- integration of environmental concerns into the design and development of the network;
- gradual achievement of interoperability of network components;
- optimization of the capacity and efficiency of existing infrastructure;
- establishment of and improvement in interconnection points and intermodal platforms;
- improved safety and network reliability;
- the development and establishment of systems for the management and control of network traffic and user information with a view to optimizing use of the infrastructures;
- studies contributing to improved design and better implementation of the trans-European transport network.

In 2004, the list of the 14 projects was extended to take account of the accession of 10 and then 12 new Member States to the EU in the amending Decision[3] on Community guidelines for the development of the trans-European transport network. The TEN-T now comprises ***30 priority projects*** which are due to be completed by 2020. The TEN-T objectives and priorities were also supplemented in this Decision in order to enhance concerns on:

- sustainable mobility;
- safety and the environment;
- development of infrastructure which promotes the interconnection of national networks;
- linkage of peripheral regions with central regions.

Of the 30 priority projects, 18 are railway projects, two are inland waterways and one is related to the motorways of the sea concept. High priority was therefore given to the most environmentally friendly transport modes.

Currently, five projects have been fully carried out and are already operational: the Cork-Dublin-Belfast-Larne-Stranraer conventional rail link, Malpensa Airport (Milan), the fixed rail/road link between Denmark and Sweden (Øresund fixed link), and since June 2007 the high-speed 'Railway east' axis (Paris-Baudrecourt, Metz-Luxembourg, Saarbrücken-Mannheim) and the Betuweroute, a dedicated freight railway connecting the Port of Rotterdam to Germany. Other TEN-T projects which are not completed yet already have sections which became operational during the MIP, e.g.

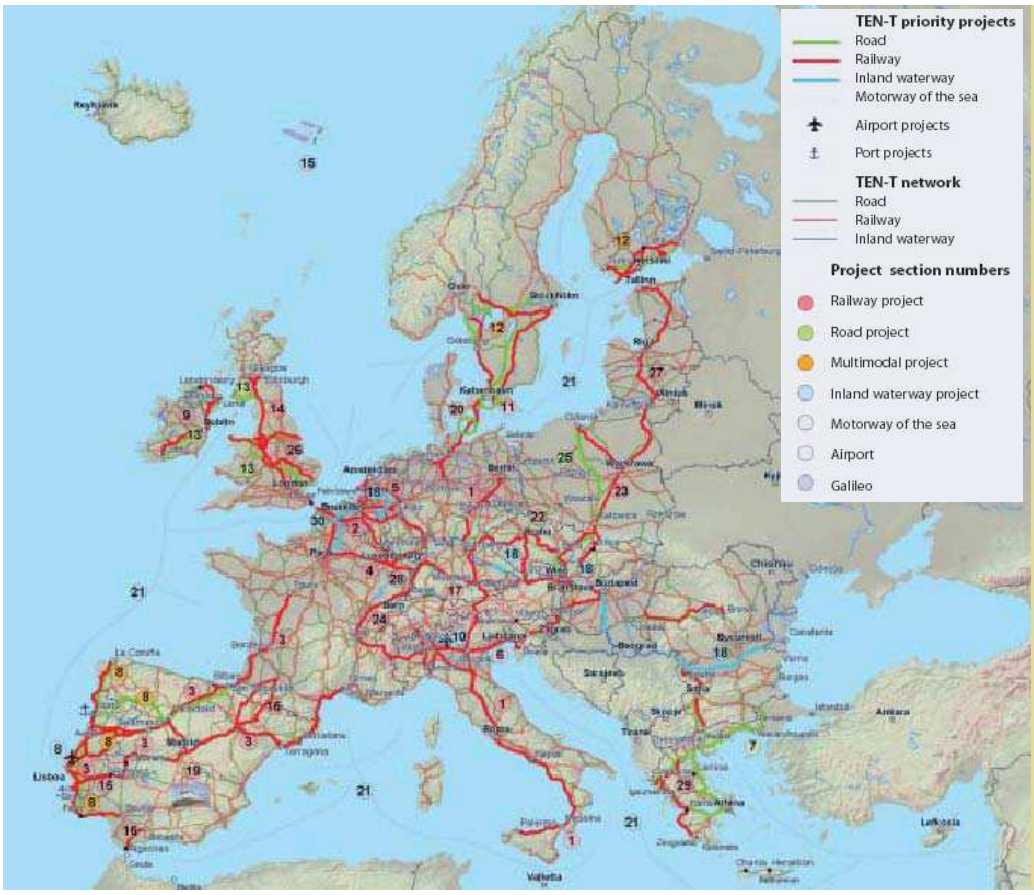
[3] No 1692/96/EC

improvements to the Brussels-Paris and Brussels-London high-speed rail links, the Kerava-Helsinki rail link, the M1 motorway scheme in Ireland, and the Rome-Naples high speed railway.

A number of EU funding sources are available to support TEN projects. Community financial support to the TENs is regulated through the ***TEN Financial Regulation***[4]. According to the TEN Financial Regulation, the dedicated TEN-T budget can be used to finance preparatory studies (up to 50%) and to fund construction (up to 10% of the total cost, and since 2004 up to 20% for projects aiming at filling cross-border sections).

Before the establishment of the MIP (Multi-annual Indicative Programme), the projects supported were financed on an annual basis under the TEN-T budget line once the Financial Assistance Committee (FAC) composed of Member States representatives had given a positive opinion. The MIP proposed continuous project financing during the whole programming period for projects that complied with the MIP requirements. However, the annual financing remained for specific projects (i.e. the non-MIP projects) in parallel with the MIP but with a smaller budget than the MIP.

[4] Regulation 2236/95 laying down general rules for the granting of Community financial aid in the field of trans-European networks as amended by Regulation 1655/99



1. Railway line Berlin-Verona/Milano-Bologna-Napoli-Messina-Palermo
2. High-speed railway line Paris-Bruxelles/Brussel-Köln-Amsterdam-London
3. High-speed railway line South-Western Europe
4. High-speed railway line East
5. Betuwe line
6. Railway line Lyon-Trieste-Divača/Koper-Divača-Ljubljana-Budapest-Ukrainian border
7. Motorway Igoumenitsa/Patra-Athina-Sofia-Budapest
8. Multimodal connection Portugal/Spain with the rest of Europe
9. Railway line Cork-Dublin-Belfast-Stranraer
10. Malpensa (completed in 2001)
11. Öresund fixed link (completed in 2000)
12. Nordic Triangle rail/road link
13. UK/Ireland/Benelux road link
14. West Coast Main Line
15. Galileo
16. Freight railway line Sines/Algeciras-Madrid-Paris
17. Railway line Paris-Strasbourg-Stuttgart-Wien-Bratislava
18. Rhine-Meuse-Main-Danube waterway
19. Interoperability of the high-speed rail network on the Iberian peninsula
20. Fehmarnbelt railway
21. Motorways of the sea
    - Motorway of the Baltic Sea (linking the Baltic Sea Member States to those in Central and Western Europe)
    - the Western Europe motorway of the sea (linking Portugal and Spain, via the Atlantic Arc, to the North Sea and the Irish Sea)
    - the South-Eastern Europe motorway of the sea (linking the Adriatic Sea to the Ionian Sea and to the eastern Mediterranean in order to include Cyprus)
    - the South-Western Europe (Western Mediterranean) motorway of the sea, linking Spain, France, Italy and Malta, and linking up with the South-Eastern Europe motorway of the sea
22. Railway line Athina-Sofia-Budapest-Wien-Praha-Nürnberg /Dresden
23. Railway line Gdansk-Warszawa-Brno/Bratislava-Wien
24. Railway line Lyon/Genova-Basel-Duisburg-Rotterdam/Antwerpen
25. Motorway Gdansk-Brno/Bratislava-Wien
26. Rail/road link Ireland/United Kingdom/continental Europe
27. "Rail Baltica": line Warszawa-Kaunas-Riga-Tallinn-Helsinki
28. "Eurocaprail" on the railway line Bruxelles/Brussel-Luxembourg-Strasbourg
29. Railway line of the Ionian/Adriatic intermodal corridor
30. Seine-Escaut Canal

3.2. The Multi-Annual Indicative Programme

Since 2001, a large part of the Community funding has been structured in a ***Multi-annual Indicative Programme*** (MIP) drawn up by the Commission. This programme covers the eleven on-going 'Essen' projects and the new priorities, namely the Galileo project, the removal of bottlenecks on the TEN-T rail network, cross-border projects and intelligent transport systems for road and air systems. The strong focus of the programme on sustainable mobility objectives is reflected in the fact that almost 64% of the total support goes to rail and that 95% of the funds involve rail, inland waterways and intelligent transport systems.

The MIP aimed to establish funding for the TEN-T network over the ***2001-2006 period***. The MIP was established to streamline and improve the management of the TEN-T network by:

- securing smooth and timely financing of priority projects (the MIP split projects into annual parts subject to individual Decisions granting aid);

- responding to the need of public and private investors for better foreseeability and for a legal certainty that support will be awarded over several years (insofar as the implementation proceeds as planned);

- encouraging public-private partnership solutions;

- providing more flexibility, taking into account unforeseen technical, financial, legal or environmental project developments (the MIP foresees the opportunity for increasing or decreasing the yearly financial aid compared to what is foreseen in the 2001 Framework Decision).

The major simplification of the management introduced by the MIP is the fact that the Community support is no longer awarded on an annual basis and that the opinion of the Financial Assistance Committee is no longer needed each year.

Concretely, the Framework Decision awarded the support to each project along six years and provided a breakdown of costs by project and by project part. This support was conditioned to the respect of the implementation plan. The first year, an application form identified activities that would be supported during the eligible implementation period by an Individual Financial Decision determining the corresponding awarded amount of the aid. The following years in order to award support to the project, the Commission evaluate the progress of the previous decision according the information received in a Project Status Report (PSR) submitted by the Member States.

As result of the Mid-Term Revision launched in 2003, an important revision of the three legal instruments of the MIP took place[5] in 2004. In the guidelines major changes have been:

- Subsequent to the enlargement, introduction of 16 new Priority Projects;

- the possibility to designate European Coordinators to harmonize the achievement of EU corridors, including cross-border sections.

- a more focused definition of the cross-border sections;

[5] Respectively, Decision 884/2004 amending Decision 1692/96, Regulation 807/2004 amending Regulation 2236/95 and Decision C(2004)3243 amending Decision C(2001)2654.

- modification of the original priorities of the guidelines;

In the MIP revision major changes have been:

- Withdrawing of projects that encountered significant delay;

- the increase of the maximum support from 10% to 20% for the projects aiming at filling cross-border sections.

In 2005 and 2006 new revisions of the Commission Decision establishing the MIP allowed the Commission to reallocate the budget to the best running projects, and fixed some additional management rules.

3.3. The European Transport Policy for 2010: a Progress Status

The 2001 White Paper put special emphasis on the need to create a better balance between road and other means of transport so as to reduce pollution and congestion and increase safety.

Nevertheless, for the time being, the largest **share of intra-EU transport** is still carried by road, which accounts for 70% of freight and around 84% of passenger transport. The share carried by rail is 10% for freight transport and 6% for passenger transport. Among the main structural trends is the fact that rail freight transport has halted its relative decline since 2001 and is on a growth path in a number of Member States (e.g. Germany, Sweden and Italy). Another salient trend has been the strong and sustained dynamism of air transport. Whereas inland waterways account for only 3% of freight transport overall, on certain corridors their share exceeds 40%. Spare capacity on corridors such as the Danube can be exploited by modernising and integrating river transport into efficient multimodal logistics chains.

Transport is a **major employer**, with more than 8 million jobs, mostly in the road sector. Despite growing transport demands, employment in some parts of the sector has declined. Clearly, the railway industry has witnessed a significant reduction in employment, even though demand for the service has remained reasonably stable.

Safety has improved considerably. Road fatalities have declined by more than 18% since 2001, although not in all Member States. However, with around 41 200 deaths and more than 1.7 million injured in 2005, road remains the least safe mode of transport and stands in sharp contrast to the relatively low level of fatalities in rail, sea and air transport accidents.

In conclusion, significant progress in the European transport sector has been recorded since 2001 in relation to the objectives of the European transport policy, but there is still more to be done.

4. METHODOLOGY

The tender specifications provide a list of evaluation questions that took account of the three different levels of assessment: project level, programme management and programme results. These levels are identified as Themes A, B and C in this report. The questions have been further refined and translated into an analytical framework that allows us to further refine them into sub-questions, judgement criteria and indicators, and to identify properly the sources of such information.

In order to cover the evaluation themes, we designed our methodology in a way which took into account some key elements (scope, overall approach) and some particular issues that we had to face.

We describe below these issues, the methodological design and elements in relation to the limits of validity and hypotheses in terms of the evaluation methods.

4.1. Key elements relating to the evaluation process

4.1.1. SCOPE OF OUR INTERVENTION

The evaluation covers the TEN-T MIP 2001-2006. The objectives and broad lines of measures and priorities of the TEN-T are defined by the Community guidelines (Decision No 1692/96/EC). The MIP aims at securing smooth and timely financing for projects of common interest on a multi-annual basis. It concerns eleven of the fourteen original Essen priority projects (PP), the Galileo programme, and four coherent Groups of Projects (GR). The principal funding options used by the Programme were the co-financing of studies and direct grants to investments.

Since the evaluation of Galileo (PP 15) and two of the GRs (GR 4 – Intelligent transport systems for road and GR 5 – Intelligent transport systems in the air sector) are carried out in separate projects, these activities are not included in this evaluation.

Hence, the scope of our evaluation directly covers:

- the Essen Priority Projects numbers 1 to 8, 12, 13 and 14;
- GR 1 – Removal of bottlenecks on the railway network to improve freight and passenger traffic; and
- GR 3 – Intra-Community cross-border projects and cross-border projects with third countries.

These projects accounted for 69% of the MIP financial support in the period 2001-2006.

Three Themes were covered by this evaluation:

- **Theme A – Assessment at project level:** the evaluation focused on effectiveness, as well as on the relevance of the Community intervention. The emphasis was upon distilling from the project level output an overall understanding of the programme implementation and results; the assessment at project level covered the 11 still on-going Essen projects and a sample of 12 projects under GR1 and GR3;
- **Theme B – Assessment of the management of the TEN-T MIP**: at the programme management level, the assessment focused on whether the systems, structure and procedures in place contributed to the effectiveness and to the efficient implementation of the Programme.

Under this Theme, we also considered whether the various changes introduced during the period under review were beneficial to the programme;

- **Theme C – Evaluation at programme level:** finally, the relevance, utility, sustainability, effectiveness, efficiency and impact (contribution to the development of the TEN-T and to the objectives promoted by the Guidelines) of the programme were evaluated.

The overall scope of the evaluation relates to the MIP in the context of the TEN-T and not the TEN-T itself. Moreover, the analysed projects are the projects co-financed by the MIP, not the overall TEN-T projects that could have also been financed by other European financing sources as the EIB or the Structural Funds. This implies, for instance, that the effectiveness of the MIP has been evaluated by considering the achievement of the MIP objectives and that its impact has been assessed through its contribution to the objectives and priorities of the TEN-T as defined in the guidelines. The evaluation did not in any way evaluate the performance or impact of the whole TEN-T programme or the Common Transport Policy. The emphasis of the evaluation is on the effectiveness and appropriateness of the MIP as a tool in the context of the TEN-T.

4.1.2. OVERALL EVALUATION APPROACH AND DATA SOURCES

Our evaluation study focused on both qualitative and quantitative aspects. Quantitative in this respect means that we looked for existing quantitative information to feed our analytical evaluation framework. The sources of the quantitative information were the European Commission itself, existing studies and databases at EU level, and studies available at Member State level. As agreed with the Commission, our evaluation team did not carry out any new quantitative measurement of any quantitative indicator, nor did it make use of or develop any quantitative econometric model.

Our approach was mainly based on:

- a large and well structured consultation of the main parties involved in the MIP, i.e. National Authorities, Project Managers (beneficiaries), national and EU stakeholders affected by transport issues, desk officers and officials responsible for the MIP. Terms of reference stated: "It is also intended to appeal to a broader stakeholders' interest on the impact of TEN-T and implications for the future development of similar initiatives at Member States or EU levels." Consequently, our approach has taken this important aspect of the evaluation into account, i.e. the involvement of the various stakeholders, collection of their opinions and views, and analysis of these in our analytical framework; in this context, the qualitative information collected through interviews has been crucial;

- existing data available at the European Commission: the evaluation team developed a database containing key information to support the evaluation process;

- existing data available at Member States level and/or at project level;

- key policy documents and studies available[6] and analysed during the desk research process.

[6] A bibliography is to be found in Annex 4.

4.2. Key issues to be considered

4.2.1. EVALUATION AT PROGRAMME LEVEL

To evaluate such a programme, it is a fact that the aggregation of project level results does not equal the overall output of the programme. The programme has its own dynamics and this has also been reflected in the analysis of the sample mentioned above.

Therefore during our evaluation project we not only paid attention to effects and results at project level (under Theme A) but also devoted attention to the effectiveness and impact at programme level (Theme C). This last element was analysed and evaluated using information collected at different levels: the database of projects, the quantitative indicators potentially available at EU level (contextual indicators), information stemming from the Theme A analysis, qualitative information relative to the programme from the fieldwork.

4.2.2. AVAILABILITY AND COMPARABILITY OF QUANTITATIVE DATA

Regarding the availability and comparability of quantitative data, two important elements should be noted:

- From experience, we know that very often the lack of systematic quantitative data collection at project level severely hampers the aggregation or comparison between projects. It is a fact that cost-benefit analysis, environmental impact analysis or other studies that could have been done at project level have been conducted using different approaches and/or methodologies. Comparison of the results of the studies at this level has then to be conducted with caution. This applies equally to the contribution of the projects to the objectives and priorities of the TEN-T: even with adequate quantitative data collection, the relationship between the MIP interventions and the objectives and priorities of the TEN-T, such as socio-economic development for instance, might be difficult to identify and assess, given that there are many other factors having an influence[7]. The qualitative information that will be collected during the interviews will make it possible to build a broader understanding of the situation and to deliver interesting findings at programme level;

- During the evaluation process, our team remained open to and paid attention to any newly identified potential quantitative indicators that could enrich our evaluation framework, especially at the level of the contribution of the MIP to the objectives and priorities of TEN-T.

4.2.3. DEFINITION OF OBJECTIVES AND ASSESSMENT OF EFFECTIVENESS AND IMPACT

In an ideal world, the evaluation of effectiveness and impact would be inter alia supported by the specification of the objectives in terms of targets or milestones. This would help the definition and

[7] At TEN-T level, the EIB ex post evaluation on cross border projects has attempted a mapping approach to rate projects according to four dimensions: employment, accessibility, efficiency and output and social inclusion. Nevertheless, this methodology could not apply to assess the contribution of project supported by the MIP to the development of the overall TEN-T due to the restricted size of supported projects.

selection of indicators[8]. In many cases, this does not happen. Objectives are very often stated in very broad terms and do not translate into quantitative results to be reached after a certain period of time.

Regarding the TEN-T MIP, apart from the budget use or the realisation indicators, there is no indication of quantitative milestones relative to the contribution to the TEN-T objectives to be reached at the end of the period 2001-2006. This does not per se create a problem when evaluating the effectiveness or the impact, but this increases the importance of collecting qualitative information on the expected results and the achieved results. Expert assessments given by the range of stakeholders that have been interviewed have been used to form a judgement and conclusions on the contribution of the MIP to the objectives and priorities of the TEN-T.

4.3. Evaluation design

We designed the evaluation process taking into consideration the elements and issues identified above. We therefore relied during the evaluation process on the following main sources of information:

- the database that has been built on the basis of the files handled by the European Commission;
- the more detailed file analysis of the files relative to the projects that have been selected in our sample;
- quantitative information available at European Commission level to feed contextual indicators;
- stakeholder-provided evidence and/or expert/intermediary opinion in order to establish or support the facts of what actually occurred. This approach has a proven track record. The collection of information happened via interviews (mainly face-to-face);
- complementary information (studies, quantitative and qualitative reporting etc.) made available to us by the project promoters during our fieldwork.

During our evaluation work we used on the one hand the quantitative data available from the file analysis and from any quantitative source identified during the interviews (but this information was not precise or comprehensive enough) and on the other hand all the qualitative information that we collected during our interviews with many stakeholders and key players.

4.3.1. TOOLS AND TECHNIQUES USED DURING THE EVALUATION PROCESS

The main tools and techniques that we used are further detailed below. The combination of tools allowed us to draw conclusions based on facts and perceptions from the interviewees.

4.3.1.1. DESK RESEARCH AND FILE ANALYSIS

We conducted desk research and consulted more than 80 documents and socio-economic analyses[9] relating to the projects, TEN-T Handbook and all the relevant EU legal documents, including

[8] See: The Evaluation of Socio-Economic Development - The Guide, December 2003, page 127: "*The indicator definition is closely linked to a policy goal, objectives and/or target. (Indeed, indicators are most helpful when objectives have been specified in terms of targets or milestones that apply the definition of the indicator*.)"

[9] A bibliography is to be found in Annex 4

Council Regulations, TEN-T Guidelines, MIP Annual Financial Decisions and Framework Decisions.

This desk research contributed to the contextual analysis of the evaluation, to the overall understanding of the MIP and the TEN-T, to the drawing up of our fieldwork interview guides, and to the analysis of the evaluation questions.

We also conducted file analysis at two levels:

- file analysis that helped us to design the structure of our database and to fill in the information that was not yet available in electronic format;
- file analysis devoted to the projects that were selected in our sample in order to allow the interviewers to have sufficient knowledge of the projects.

We also conducted an analysis of the documents that have been made available to us by the Project Promoters. This analysis was carried out by using a grid containing the following items: the indicators available, their evolution over time, the main findings, and their link with the evaluation questions. A full list of the documents consulted is available in Annex 4

4.3.1.2. INTERVIEWS

We met a large number of interviewees during our fieldwork. We conducted interviews at different stages during the evaluation process:

- Interviews with key Commission officials at an early stage in order to build a view on the overall context surrounding the MIP;
- More detailed interviews with Commission desk officers to collect views and facts about the projects in the different Member States, MIP management procedures and implementation processes;
- Interviews with project promoters in the 15 Member States, that took place between May and September 2007.

The breakdown below details the interviewees by category:

Table 1 : Interviews – distribution by category of interviewees

Category	Number of interviewees
Commission officials	17
Of which: desk officers	12
National authorities	28
Project promoters	77
Total	122

4.4. Elements in relation to the limits of validity and hypotheses in relation to the evaluation methods

We identified above important issues which need to be taken into account when evaluating programmes. We also identified some problems that we encountered during the evaluation process.

4.4.1. LACK OF QUANTITATIVE INFORMATION

We attempted during our fieldwork to find relevant information relative to the effectiveness and impact issue. But as the information was not always available and/or comparable, it was impossible at this stage to obtain data of sufficient value to enable overall quantitative measurement relative to the contribution to the TEN-T objectives (at least from a quantitative point of view).

We intended to use the MIP project appraisals to define the expected contribution to the TEN-T objectives and priorities. However, this was not possible as it was not certain that the assessment grids had always been filled in the same way by the different Commission desk officers[10]. This was, in our opinion, mainly due to the fact that the objectives were very broadly defined and the definition was not clear and unequivocal (e.g. removing a bottleneck). Moreover, a project could contribute to more than one objective directly or indirectly. The assessment grids were not designed to provide comprehensive information and to reflect the potential cause/effect relationships between different objectives (e.g. creating a new infrastructure is only one of the possible solutions for removing a bottleneck). These assessment grids could not play the role of ex ante evaluations or substitute an effective monitoring system that could have been defined to collect information and indicators on the projects.

It should also be noted that a lot of projects supported under the MIP were either studies or investment works that were still on-going. The quantitative information relative to the contribution of such projects was then by definition unavailable at the moment of our study. Studies cannot themselves contribute to the TEN-T objectives (but they can support projects that, when realized, could contribute to them). Works not yet finished could hardly have measurable effects or contribute to the TEN-T objectives.

4.4.2. INTERVIEWEES

Despite the Commission's support for our efforts in seeking interviews, we encountered difficulties in some countries in persuading potential interviewees to meet us in the timeframe originally scheduled for the interviews. That caused some delays in our analysis process.

Moreover, the interviewees we were able to meet did not always have a good knowledge of the MIP procedures and its management. This was mainly because the management of the MIP is split between several levels within the different institutions and organisations at Member State level: Ministry of transport, infrastructure management, etc.

Nevertheless, the total of interviews with a very wide range of relevant parties, coupled with the file analysis we performed in Brussels, provided sufficient inputs to allow us to answer most of the evaluation questions with confidence.

[10] Indeed, in 2004, the European Commission stopped using this kind of assessment grid.

4.4.3. EVALUATION OF THEME A – AT PROJECT LEVEL

Theme A is not about evaluating the projects selected in our sample. We were not entitled or requested to carry out any individual project evaluation. This is not a limitation as such, but we feel it is important to stress for the understanding of the non-specialist reader that the terms of reference, "the emphasis here is upon distilling, from the project level output, overall understandings of the programme implementation and results". Hence most of the information collected and the analysis conducted under Theme A can be found back in Theme C in our report[11]. The individual characteristics of each project are presented for information purposes in the single-page description presented in Annex 5.

We also draw attention in this context to the fact that we did not analyse the projects at Annual Financial Decision level but at the project level involving several project parts.

[11] Despite the fact that the evaluation did not cover all the projects, the sample did represent more than 50% of the financial support during the period under review, so that it can be considered that the information collected at this level, appropriately summarised, is a good proxy for use under Theme C.

5. ANSWERS TO EVALUATION QUESTIONS

5.1. Theme A: Assessment at project level

The aim of the analysis of Theme A was to gather sufficient information at this level to allow us to aggregate project level results in order to evaluate the overall output of the MIP based on a representative sample. We have therefore not performed specific in-depth evaluation of the projects, but have used in-depth interviews with national governments and project promoters to complement the understanding of the projects obtained from desk research. The main findings from the interviews are presented by project in the project sheets provided in Annex[12].

These sheets can be used as a source of information on the extent to which the projects achieved the objectives set for them, the current status of the project and the role the MIP funding played in the financing of the project. These give a top-level indication of the impact, effectiveness in terms of sustainability, relevance of the funding in terms of need of the individual projects, and actual as opposed to planned cost, and have fed into our judgement of the overall effectiveness and relevance of the MIP programme as described in this Theme and Theme C.

The project sheets provide information on:

- type (study or investments);
- the Member State/s responsible;
- the type of work (new infrastructure/upgrading of existing infrastructure);
- the total eligible cost;
- the maturity of the projects in 2000 and 2006;
- the national interest for the project (willingness of the public authorities to carry out the project).

Most of these characteristics are explicit (Member State/s responsible, distinction between study and investment). However, the maturity of the project and national interest were assessed by the evaluator on basis of the desk analysis, and the interviews with the project promoters and Member States.

The maturity of the projects was assessed based on a categorisation of 10 project phases described in the table below[13]:

[12] These project sheets are included in the database.

[13] These phases have been identified by our experts and a review of existing literature regarding the project cycle of major infrastructure projects such as: Youker, R., Managing the project cycle for time, cost and quality: lessons from World Bank experience, Keynote paper, INTERNET 88, Glasgow, 1988, Vol 7 No 1 February 1989 p54; http://www.route.equipement.gouv.fr; http://www.construction-int.com.

Table 2 : Project cycle Phases

Project cycle phases	Description	Main phase
1. Project identification	Political negotiation, first socio-economic studies, first political decision	Project Preparation
2. Pre-feasibility study	Exploration of several scenarios	Project Preparation
3. Project preparation - feasibility study	More concrete studies realised on the selected scenarios	Project Preparation
4. Financing (including appraisal by financial institutions)	Exploration of the way of financing the infrastructure and decision	Detailed design of implementation
5. Detailed engineering studies	Technical studies on the way of implementing the infrastructure, planning and design	Detailed design of implementation
6. Permits	Administrative procedures in order to get urbanism, environment… permits	Detailed design of implementation
7. Procurement procedures	Call for proposals and selection of the suppliers / land acquisition	Detailed design of implementation
8. Project implementation	Concrete realisation of the infrastructure	Construction
9. Commissioning	End of the work, conformity assessment	Construction
10. Operation	Exploitation, maintenance…	Use

For convenience we have in some instances used the four main groupings in column three of Table 2, i.e. project preparation, detailed design of the implementation, construction and use on the basis of evaluator experience and different guidelines for assessment of major infrastructure projects or documents consulted during the desk research.

The project sheets also contain an assessment of how the different projects contributed to one of several objectives of the TEN-T. We assessed this *ex novo* rather than use the assessments made by the Commission in the MIP project appraisals of 2000[14] because:

- the guidelines for appraisal, used by Commission officials and mentioned in the MIP Projects Appraisal form were not available any more. Consequently, it was not possible to analyse whether this assessment were comparable from one desk officer to another;
- the appraisal of the contribution to TEN-T objectives was dropped in subsequent appraisals;
- the Commission itself did not rely on this appraisal.

The distribution of the projects supported and of the awarded amount by main objectives is presented at the consolidated level in the Theme C dealing, evaluation at programme level, of the present Report.

[14] In the first template of the appraisal, Commission Officers were asked to assess on a scale from 0 to 2 the contribution of the project to the objectives as formulated in the Guidelines. As from 2004, new projects appraisal template did not evaluate this contribution anymore.

5.1.1. PROJECTS INCLUDED IN THE SAMPLE

As noted above, and as agreed with the European Commission on the basis of the inception report, we looked in detail at 48 projects of the 117 projects supported by the MIP during the period 2000-2006.

These projects are:

- all the decision related to the Priority Projects identified at Essen Council in 1994 (with the exception of PP-1212[15] at the Commission's request, PP609 moved into PP608 – no decision has been analysed for the projects PP10, PP11 and PP15, which were already complete or were outside of the scope of this assignment);

- a sample of 13 projects and relative decisions selected at random from amongst coherent Groups of Projects (GR): 9 projects from GR1 (Removal of bottlenecks on the railway network to improve freight and passenger traffic) and 4 projects from GR3 (Intra-Community cross-border projects and cross-border projects with third countries).

For evaluation purposes, due to the fact that the project parts were too different, we split project GR3010 (Multimodal extension of the corridor Hamburg – Öresund region incl. Fehmarn Belt fixed link) into its two project parts; GR3010A (studies on railway part in Denmark) and GR3010B (upgrading of the railway access lines to future Fehmarn Belt Fixed Link) and Project PP1301 (Irish element of Ireland/United Kingdom/Benelux road corridor) into PP1301A (planning and design of the whole section) and PP1301 C (Section: N8 Cashel By-Pass) on the one hand and PP1301B (cross-border section) on the other hand. We therefore based our indicators on 50 projects.

Of these projects:

- 21 are investment projects, 17 are studies and 12 carried out both studies and investments;

- 4 are cross-border projects[16].

The following table lists the projects:

Table 3 : List of projects included in the sample

Project ID	Member State	Name of the project
PP101	DE	Berlin Railway node: measures in Lehrter Bahnhof and Bahnhof Papestrasse stations; upgrading of Südkreuz-Ludwigsfelde and Sudkreuz-Blankenfelde sections
PP102	DE	High-speed railway link Nuremberg-Munich: construction of new Nuremberg - Ingolstadt section: upgrading of Ingolstadt - Munich section
PP103	AT	Construction of new double track high-speed railway line Kundl/Radfeld –

[15] Finnish ice breaker project.

[16] These four cross-border projects are PP104 (Brenner base tunnel), PP306 (section Figueras-Perpignan), GR3009 (Fehmarn Belt Fixed Link) and PP1301B (cross-border section of the Ireland/United Kingdom/Benelux road corridor.

Project ID	Member State	Name of the project
		Baumkirchen (including preparatory works)
PP104	AT/IT	Brenner base tunnel: technical, legal, financial and economic studies
PP201	NL	PBKAL/Dutch part: a) A4 motorway crossing; b) bored tunnel Leiderdorp - Westeinde; c) infrastructure works Heerjansdam - Lage Zwaluwe; d) Rotterdam Station.
PP202	UK	PBKAL/UK part: construction of section 1, studies and construction of phase 2
PP203	DE	PBKAL/German part: upgrading of Düren - Aachen - German - Belgian border section; infrastructure works for new Cologne - Frankfurt line
PP204	BE	PBKAL/Belgian part: Franco-Belgian border - Liège - Brussels - Belgian-German border section; Brussels - Belgian-Dutch border section
PP301	ES	Studies in relation to high-speed line between Madrid - Saragossa - Barcelona and the French border
PP302	ES	Studies in relation to the Madrid - Valladolid/Medina del Campo high-speed line. Sections: Madrid - Segovia and Segovia - Valladolid/Medina del Campo
PP303	ES	Studies in relation to the Spain-France link on the Atlantic coast: Valladolid-Vitoria sections and a new railway network in the Basque Country
PP304	FR	Studies and construction of the Nîmes - Montpellier - Perpignan section of the high-speed line
PP306	ES/F	Studies and construction of the international section between Figueras and Perpignan of the Madrid - Barcelona - Perpignan - Montpellier high-speed link (joint request of the two governments concerned)
PP401	FR	European TGV East (TGV Est Européen): Construction Phase I (Vaires - Baudrecourt)
PP402	DE	Railway link Paris – Eastern France – South Western Germany: upgrading of section Ludwigshafen – Saarbrücken – German-French border for high-speed traffic
PP501	NL	Betuweline: a) Botlek tunnel; b) Sophia tunnel; c) superstructure A 15 line; d) substructure A 15 line.
PP602	FR	Upgrading of the Lyons - Modane line
PP603	FR	New Lyons -Turin transalpine railway link – international section (F)

Project ID	Member State	Name of the project
PP604	IT	New Lyons -Turin transalpine railway link – international section (I)
PP605	IT	Upgrading of railway junctions to connect with high-speed lines in order to increase the fluidity of East/West traffic (Turin: the Susa-Dora section, technological improvements to the junction)
PP606	IT	Upgrading of the Turin - Modane line and the Turin freight belt
PP607	IT	Enhancing the productivity of infrastructure and technologies in order to increase the fluidity of East/West traffic (the Pioltello - Treviglio and Rovato – Padova sections).
PP608	IT	Reorganisation of the Venice/Mestre railway junction
PP701	EL	Egnatia Motorway: technical Studies - final stage
PP801	PT	New Lisbon Airport – Structuring of the Public-Private-Partnership
PP802	ES	Studies for the Portugal-Spain/Europe multimodal link. Fuentes de Oñoro - Valladolid and Galician Atlantic axis sections (Tuy-Coruña-Ferrol)
PP901	IE	Conventional rail line: Cork - Dublin - Belfast - Larne - Stranraer, Belfast – Dublin - Cork intercity rail corridor
PP1201	SE	Nordic Triangle/Swedish part: Malmö Citytunnel (Rail) - studies, technical design and works
PP1202	SE	South Main Line/West Main Railway Line – selected infrastructure improvement measures
PP1203	SE	Nordic Triangle/Swedish part: studies for remaining parts of E6 motorway; upgrading of Torp - Håby and Rabbalshede - Swinesund sections of E6 motorway
PP1204	FI	Nordic Triangle/Finnish part: E18 Motorway, construction of Paimio - Muurla and Helsinki Ring III sections
PP1205	FI	Nordic Trianlge/Finnish part: railway infrastructure upgrading on the following sections: Riihimaki - Luumaki, Helsinki - Riihimaki, Kouvala - Kotka and Leppavaara - Kirkkonummi
PP1301	IE	Planning and design of Ireland element of the Ireland/United Kingdom/Benelux Road Link; Dundalk-Newry cross-border section; Cashel by-pass
PP1302	UK	A120 Stansted to Braintree road upgrading
PP1401	UK	West Coast Main Line Route modernisation
GR1001	AT	Danube railway axis: construction of Enns bypass and Rohr freight bypass
GR1009	ES	Studies relating to the Madrid-Castilla La Mancha - Valencia Community - Murcia region high-speed link

Project ID	Member State	Name of the project
GR1014	EL	Attica Suburban rail: development studies
GR1019	IT	Rome rail hub: construction of the high speed urban junction.
GR1020	LU	Increase train circulation capacity and safety in the Northern sector of Luxembourg City station (Pulvermuehle Viaduct)
GR1021	NL	High Speed rail link Dutch Randstad - Rhine/Ruhr, Amsterdam- Utrecht section; construction of the Utrechtboog
GR1023	PT	High-speed Rail: studies of executive projects relating to the Lisbon - New Lisbon airport section
GR1025	FI	Removal of bottlenecks on the railway network in Finland: Luumaki - Joensuu and Oulu - Iisalmi/Vartius sections
GR1110	FR	New Project: TGV Rhine - Rhône (S)
GR3001	AT	Study, prepatory measures and pilot test for the removal of bottlenecks on the Danube waterway in the section Vienna - Austrian-Slovak border
GR3004	DE	Upgrading of the Berlin - Frankfurt/Oder railway line (part of pan-European transport corridor no. II): technical studies and project implementation
GR3009	D/DK	Fehmarn Belt Fixed Link: technical studies, design studies and preparation of tendering documents
GR3010	DK	Studies and works for the upgrading of railway access lines to the future Fehmarn Belt Fixed Link

5.1.2. EVALUATION CRITERIA AND LIMITATIONS OF THE APPROACH

The indicators at the basis of our global judgment of the output of the MIP in relation to the performance of the projects are primarily:

- the absorption rates of the different projects, defined as the ratio of the total amount awarded as opposed to the foreseen amount in the 2001 or 2004 Framework Decision[17], and
- the ratio of the support actually awarded to the total eligible cost.

We are conscious these indicators are only a proxy for the performance of the projects since they do not take into account the efficiency of the project, e.g. if a project cost less than was foreseen, thanks to an economy of scale or some other reasons. In this case, it has performed well, but has a low absorption rate. Nevertheless, since infrastructure projects usually cost more than forecast, money spent seems a reasonable proxy in the absence of quantified performance indicators,

[17] Depending which applies.

comparable from project to project in the PSRs provided each year, or in the technical reports provided by the project promoters at the closure of the AFD.

5.1.3. FINDINGS FROM THE ANALYSIS BY PROJECT

5.1.3.1. PERFORMANCE OF THE PROJECTS SUPPORTED

In absolute and simplistic terms, it can be argued that the MIP was an effective programme because all the funding was awarded, and therefore its absorption rate was one. However, the process was not linear. In fact, two revisions of the framework decision made it possible for the European Commission to redistribute support from projects that were delayed to those which were performing well.

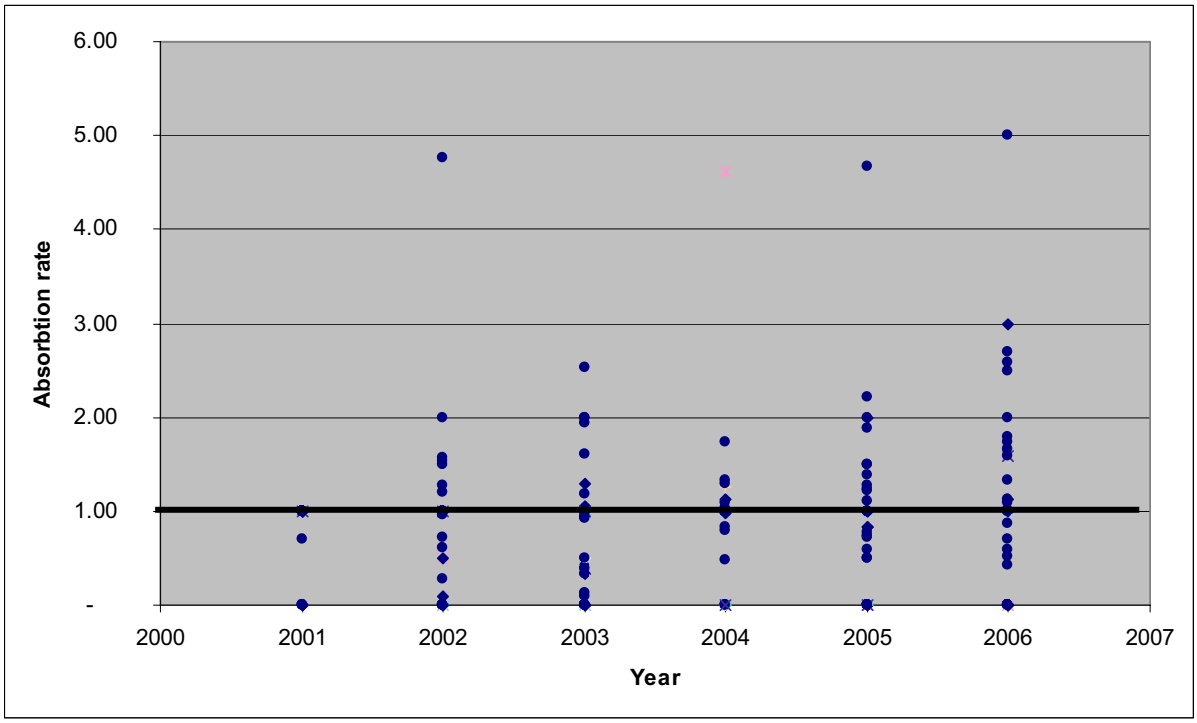
Of the 50 projects in the sample, only projects PP605 (Italy: upgrading of Susa-Dora rail section) and GR3010A (Denmark: Studies and works for the upgrading of railway access lines to the future Fehmarn Belt Fixed Link) were stopped in 2004 for reasons of non performance. In Denmark, the reason was technical and in Italy political (due to local opposition to the project).

If we consider the actual variability of the support through year, we can see that the variation around the mean (1) was considerable.

Figure 1 presents this variation: Y axis is the absorption rate (the ratio of support awarded to support foreseen) of a given project and the, X axis shows the year in which this project was supported by MIP. Each point is a project.

If all the projects had been supported as foreseen each year, then all the points would be at the value 1. Given the fact that all the budget of the MIP was absorbed, the average absorption rate of the MIP is also equal to 1 (line in bold in the figure).

Figure 1 : Variation around the mean of annual funding



Source: Commission (data) and Deloitte (calculation and figure)

This Figure shows that with each passing year, more and more projects were above or below the average, but with a break in the series in 2004 because of the revision that year that introduced new projects and dropped those not going ahead.

We can therefore say that at a constant average absorption rate at MIP level, some projects performed better and others less well.

5.1.3.2. PERFORMANCE BY TYPE OF PROJECT

The average absorption rate of the sample of projects analysed during the assignment is 1.19, i.e. higher than that of the MIP itself (1), in other words the support awarded exceeded the support foreseen in the framework decision of 2000 or 2004 by 19% (Table 4).

Table 4 : Absorption rate of projects

Type of project	Cross border	Absorption rate
Investment	No	1.27
	Yes	1.42
Investment Total		1.28
Study	No	0.63
	Yes	1.27
Study Total		0.86
Study and investment	No	1.65
	Yes	0.82
Study and Investment Total		1.51
Grand Total		1.19

The overall ratio of MIP support in relation to the eligible cost is some 23% (Table 5).

Table 5 : MIP support in relation to eligible costs.

Type of project	Cross border	Support (%)
Investment	No	7.5
	Yes	13.6
Investment Total		8.1
Study	No	40.1
	Yes	48.6
Study Total		43.1
Study and investment	No	18.3
	Yes	31.3
Study and Investment Total		20.4
Grand Total		22.9

The support awarded was, in general terms, in line with the maximum Community participation stated in Art. 4 and Art. 5 of the Council Regulation[18] (7.5% for investment, 43% for studies and 13.6% for cross-border projects).

It is clear from the tables that investment projects performed better than studies. This seems to be due to the fact that during the construction phase, project promoters have clear deadlines and few difficulties in spending money and providing invoices in order to justify the eligible costs. Interviews with projects promoters indicate that the that project promoters tend to optimize the use of MIP support by submitting, as eligible costs only one part of the total cost of the project that they are confident will be completed on time. For studies on the other hand, eligible costs usually correspond to the overall total cost.

[18] Council Regulation (EC) No 2236/95 laying down general rules for the granting of Community financial aid in the field of trans-European networks amended by Regulations (EC) No 1655/1999 (EC) 788/2004 and (EC) 807/2004

This statement could be substantiated if there were data on the ratio of eligible costs to the overall total cost of the project, but this information was not clearly sought of Member States at the application phase.

5.1.3.3. PERFORMANCE BY MEMBER STATE

Table 6 gives the average absorption rate by member state.

Table 6 : Absorption rate by member state

MS	Absorption Rate
AT	2.5
SE	2.2
FI	1.7
PT	1.3
IE	1.2
FR	1.1
IT	1.1
ES	1.1
LU	1.0
BE	1.0
DE	0.9
UK	0.9
NL	0.8
EL	0.8
DK	0.3

Austrian and Swedish projects had particularly high absorption rates. In the case of Sweden, the reason appears to be that the projects were of below average size, and in the case of Austria, that they were very mature.

Danish projects, on the other hand, suffered of a lack of maturity (i.e. political decisions changed in the course of the project), while the Greek projects encountered technical and administrative problems. In the Netherlands, the project changed in scope in the course of implementation and in the UK, the project promoter, Railtrack, went into liquidation in the course of the programme.

5.1.3.4. PERFORMANCE BY TYPE OF WORK

We also compared the performance of projects aiming at implementing new infrastructure with that of the projects involving upgrading or optimizing existing infrastructure (Table 7).

Table 7 : Absorption rate by type of project (new/upgrading)

Type of project	Absorption rate
Both	1.8
New infrastructure	1.1
Upgrading/optimization of existing infrastructure	0.7
Average	1.2

It could be regarded as surprising that projects involving upgrading encountered more difficulty in absorbing MIP funding than others. However, these projects include the Danish projects in relation to upgrading of the link with Fehmarn Belt and the Susa-Dora section in Italy. This is also due to the fact that proportion of studies within these projects was higher than in new infrastructure or mixed projects.

5.1.3.5. PERFORMANCE BY SIZE

Table 8 shows the absorption rate by overall budget (expressed in the amount of eligible costs).

Table 8 : Absorption rate in relation to eligible costs

Budget	Absorption rate
Between €100m and €200m	2.7
More than €500m	1.4
Between €50m and €100m	1.4
Between €200m and €500m	1.3
Less than €50m	0.7
Average	1.2

These figures show that the biggest projects performed relatively better than small ones. This seems to be attributable to the fact that, as in the case of the distinction between studies and investment, large projects are more able to consume money on a regular basis and consequently can absorb more funding than initially foreseen.

5.1.3.6. PERFORMANCE BY MATURITY

As stated above, we distinguished between four main phases in the project cycle: project preparation, detailed design of implementation, construction and, finally, operation of the project.

In order to assess the performance of the projects in function of their maturity, we considered the maturity of these projects in the first year they received support from the MIP. Table 9 shows the respective absorption rates.

Table 9 : Absorption rate by maturity rate at outset

Maturity phase	Absorption rate
Construction	1.4
Detailed design of implementation	1.3
Project Preparation	0.9
Average	1.2

It is clear that the more mature the project, the more likely it is that it will be able to absorb more funding than foreseen. This finding clearly emerges from the fieldwork as well. Projects are less likely to absorb the funding in their early stages because the uncertainties are much greater at that point, both in terms of the specifics of the project and the strength of the political backing for the project.

5.1.3.7. PERFORMANCE AS A FUNCTION OF NATIONAL INTEREST

The MIP is designed to leverage infrastructure works that would not be implemented as such by the Member States. The question of the national interest in the projects is therefore highly relevant.

As indicated above, the question of national interest was assessed by the evaluator on the basis of the interviews with the public authorities of the Member States and the project promoters.

Table 10 : Absorption rate as a function of national interest

National Interest	Absorption rate
High	1.3
Medium	1.0
Low	0.6
Average	1.2

We can see from these figures that projects fully supported by the Member States tend to perform better than others in spite of the MIP support.

Nevertheless, we must nuance this finding at this stage: overall, most projects were supported by the Member States and the findings from the stakeholder interviews showed that MIP succeeded in some cases in creating a priority for projects with the most EU added-value. This issue will be dealt with in greater depth in Theme C.

5.1.4. CONCLUSIONS OF THE ANALYSIS BY PROJECT

Overall, and broadly speaking the projects best able to absorb the MIP funding were large projects in new infrastructure which were already mature and in which the Member State had a high interest. This is intuitively logical since such projects are at a stage where they face less technical and political uncertainty. However, there are outliers which are the exception to the rule that large projects are best able to absorb the funding, such as smaller Swedish projects. Since it is an objective of the MIP to support the most sizable projects and, this objective appears to have been met. However, the issue of whether the MIP actually acted as a lever and the extent to which the European interest was served is dealt with under Theme C.

5.2. Theme C: Evaluation at programme level

5.2.1. EVALUATION SUB-QUESTIONS

The evaluation sub-questions examined in this section, as stated in the evaluation framework, are:

- **effectiveness** of the MIP, or the extent to which MIP succeeded in achieving its specific objectives;
- **relevance**, or the correspondence of these objectives with the needs of the beneficiaries;
- **impact**, or the contribution of the MIP to the TEN-T objectives and priorities;
- **efficiency**, or the cost/effectiveness relationship;
- **sustainability**, or the extent to which MIP effects are likely to persist in the future.

5.2.2. LIMITATION OF THE APPROACH

The main limiting issue we encountered in evaluating the effects of the MIP was the lack of information regarding the impact of projects that are not or have recently been finished. This issue has already been described in the section on Methodology.

5.2.3. EFFECTIVENESS

Answering the question on effectiveness requires assessing to what extent the TEN-T MIP achieved its specific objectives as stated in the MIP framework decision[19] and displayed in the analytical framework of the inception report:

- to improve foreseeability and accountability for the investors, to provide legal certainty that Community aid will continue in several future years;
- to provide some flexibility in order to take account of unforeseen technical or financial developments in the projects;
- to mobilise public and private financial resources (PPP's);
- to award smooth and timely financing for the most sizeable of the projects.

For evaluation purposes, we have added the specific concept of accountability of the beneficiaries.

19 Commission decision C(2001) 2654 establishing an Indicative Multiannual Programme for the granting of Community financial aid to projects of common interest in the area of the trans-European transport network for the period 2001 - 2006

5.2.3.1. FORESEEABILITY/LEGAL CERTAINTY

Foreseeability can be seen as meaning:

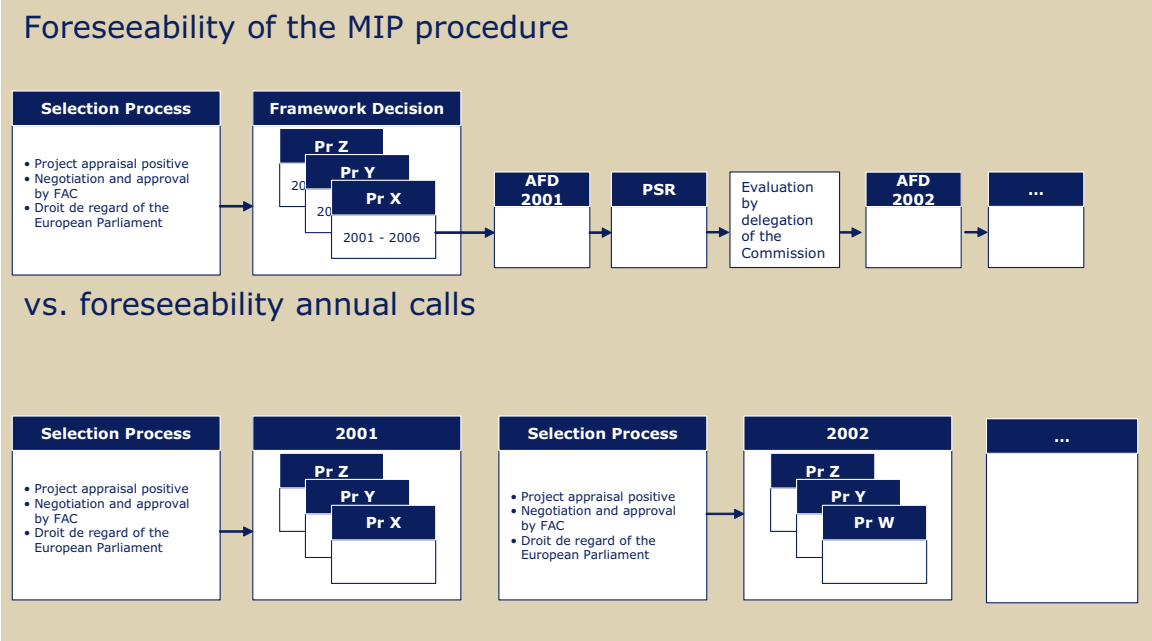
- ex-ante, the ability of the MIP to reassure beneficiaries regarding the financing of the project in the following years;
- ex-post, the ability of the MIP to provide what was actually planned.

When analysing the **legal certainty**, we describe the legal framework that ensures that Community aid will continue for several years.

Legal certainty

The figure below summarises the procedures of the MIP and the TEN-T annual calls.

Figure 2 : Procedures for MIP and Annual Calls[20]



The differences in procedure between MIP and Non-MIP were discussed and illustrated in Theme B, i.e. in the MIP procedure there is one selection process discussed and approved by Member States through the Financial Assistance Committee (FAC), with the right of review (*droit de regard*) of the European Parliament (EP) and Interservice consultation (ISC), to decide on the projects and the financing at the outset. The Framework Decision then covers a financing period of six years and is called the Framework Decision. In the following years, annual financial decisions (AFD) on selected projects can be adopted without being discussed at TEN-T-FAC meeting, on the basis of the project status report (PSR) provided by the project promoters. In the annual call procedure there is an annual selection process with the involvement of the Ten-T FAC to decide on the selection of the projects and to adopt the financial decisions.

20 For acronyms, see list on page 7

The obvious difference between the two procedures is that the MIP Framework Decision of 2001 guarantees that Community aid will continue in the coming years provided that the project performs as expected[21]. One can therefore say that, for projects that performed in line with the forecast, legal certainty is guaranteed.

Foreseeability

Interviewees claimed that, compared to the annual call procedure, the MIP was effective in increasing foreseeability as perceived at the beginning of the MIP period (ex-ante). The Framework Decision plays a key role in this as it gives, at the beginning of the period, a six-year view on the planned annual budget allocation for a project.

However, when we look at the average implementation period of such infrastructure projects, we see that it often exceeds six years. Of the 50 projects from our sample that received MIP support in 2001, 12 are in use[22] in 2007. Moreover, all the Priority projects were decided in 1994 at the Essen Council. The foreseeable period offered by the MIP (six years) is thus relatively limited in relation to the entire project timeframe. This decreases the foreseeability for project promoters and potential investors.

In terms of actual ex-post foreseeability of the planned amounts, we have compared the actual support awarded with the amounts foreseen at the beginning of the MIP period.

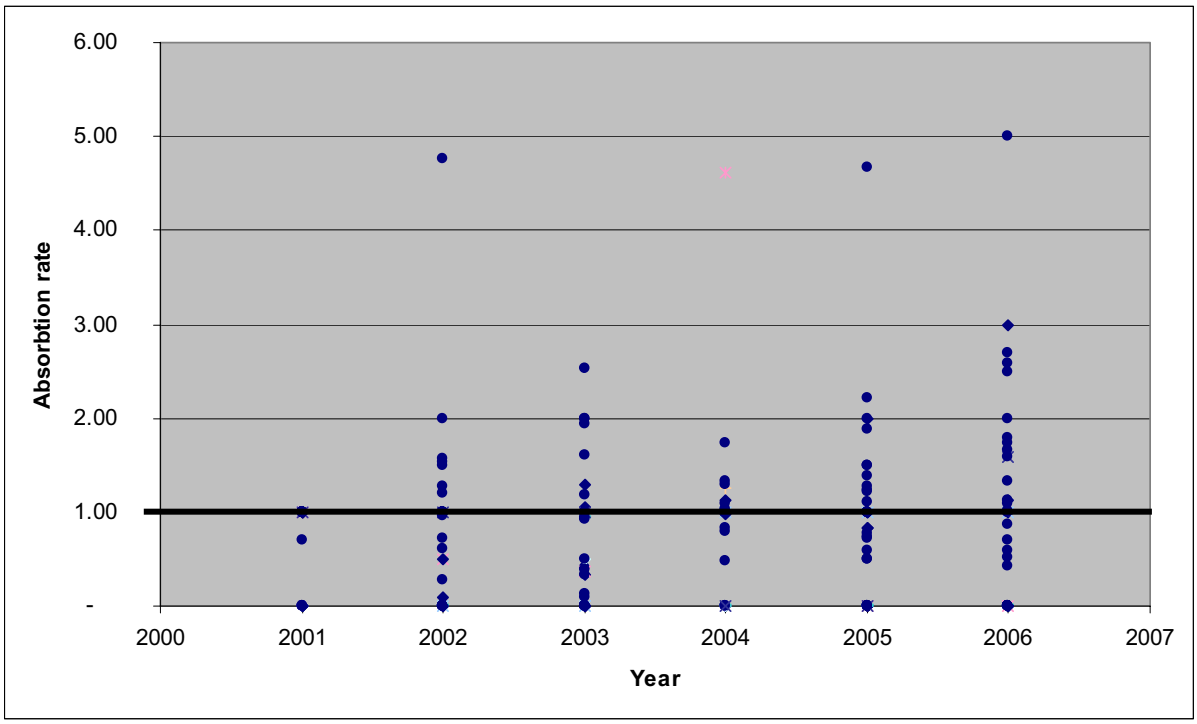
In ***Figure 3*** we provide an overview of the absorption rate per project per year[23]. The planned costs are based on the amount agreed in the Framework Decision in either 2000 or 2004 (the latter for projects that only began in 2004).

21 Annex 1 of AFDs 2002 states that as a general rule, a subsequent decision may be adopted if, according to the reported data, more than 70 % of the cost of the study or project, as set out in Annex 1 of the Decision, has been reached. Subject to an assessment of the forecast development during the year ahead, the full amount of aid as set out in decision C (2001) 2654 for the year concerned may be granted.
If between 50 % and 70 % of cost of the study or project, as set out in Annex I of the Decision, has been reached, subject to an assessment of the forecast development during the year ahead, a maximum of 50 % of the aid as set out in Decision C (2001) 2654 for the year concerned may be granted.
No new decision shall be allowed if less than 50 % of the cost of the study or project, as set out in Annex I of the Decision, has been reached.
In case a study or project has progressed considerably faster than originally foreseen, and the assessment of future progress also indicates accelerated development, the subsequent decision may cover the programmed activities of two years. In this case, the aid programmed in decision C (2001) 2654 for two subsequent years may be granted through one single decision.

22 In use does not mean fully completed, e.g. in some sections in use, the upgrade to maximum speed is not yet complete, and in others sections supported by MIP are ready while other sections are not

23 As stated in Theme A, the absorption rate is the ratio between the awarded and planned funds.

Figure 3: Absorption Rate of Projects by Year



Source: Commission (data) and Deloitte (calculation and figure)

Each point in this Figure corresponds to one project. If a project actually received the planned support as stated in the Framework Decision, its absorption rate is equal to 1. A rate of 2 implies that a project absorbed twice the funding that was foreseen in that year; a rate of 0.5 implies that a project absorbed half the funding that was foreseen in that year, etc.

The main insight from this is that the absorption rate is very variable below and above 1 as from 2002. In other words, thanks to the rule linking support to the progress of the project (as assessed through the PSR), projects usually did not receive what was originally planned. There were projects that ran well (with a rate above 1) and projects that encountered problems absorbing the MIP budget attributed to them (with a rate below 1). By the end of the programming period, only 10% of the projects supported (12 projects out of 117) had actually received what was planned, while 32% received more, and 58% received less.

It is interesting to note that the 2004 Revision, by introducing new projects and by reallocating support for the following three years, focused the projects around the mean[24]. However, in 2005 and 2006, the actual figures scattered again from 0 to 3.

In Table 11, we have calculated the average absorption rate for the period 2000-2006 per project phase of the projects at the beginning of the MIP period[25]. We can see that, ex-post, the

24 At the beginning of 2004 there was a new Framework Decision introducing new projects. For these projects, support awarded in the Annual Decision for 2004 is equal to what was foreseen in the Framework Decision. Consequently the ratio awarded/foreseen in 2004 equals 1 for these new projects.

foreseeability is high for projects that were in the "construction" or "detailed design of implementation phase" at the beginning of the MIP period. Projects in the preparation phase were less likely to receive the planned funding due to the numerous elements of uncertainty for projects that are in their preparation phase at the moment of application.

Table 11: Absorption Rate by Phase and by Year

Main Project Phase 2000	Average absorption rate 2000 – 2006
Construction	1.37
Detailed design of implementation	1.31
Project Preparation	0.84

The same type of insight is provided if we look at the average number of AFDs by project phase that has not been triggered (this is detailed in the table below[26]) as compared to what could have been expected.

Table 12 Average number of AFD's not adopted by project

Project phase at the beginning	Average Number of AFDs not triggered by project
Construction	1.14
Detailed design of implementation	0.95
Project Preparation	1.94
Grand Total	1.32

Projects under construction or in the "detailed design of implementation" phase received on average more decisions compared to what was planned, than did projects in the preparation phase.

We mentioned above that receiving the full allocation is linked to the performance of the project and that this performance is evaluated using the so-called "50-70 rule". This approach does not seem entirely clear to project promoters, thereby hampering the desired foreseeability. Some project promoters believed that even if their project ran well, the support would be less than the amount awarded in the Annual Financial Decision, which is, of course, baseless. Other project promoters did not know that, were their project to run better than expectations, they could receive in one year the amount awarded for the next two decisions.

25 Only for the sample of evaluated projects.

26 Only for the sample of evaluated projects.

Nevertheless, Member States and project promoters generally acknowledge the added value of the MIP in terms of foreseeability "ex-ante", even if this foreseeability is limited as regards the overall project planning and cost.

5.2.3.2. ACCOUNTABILITY OF THE BENEFICIARIES

In our understanding, the "accountability" principle could be defined as the beneficiary's obligation to demonstrate that the studies and investments co-financed by the MIP were conducted in compliance with agreed rules and standards and to report fairly and accurately on performance results vis-à-vis mandated roles and/or planning.

We have evaluated whether the MIP increased or has had an effect on the accountability of the beneficiaries by taking the following aspects into account:

1. The long-term commitment of the beneficiaries to finance their share of the implementation process of the relevant infrastructure project;

2. Their compliance with project planning as defined in the Framework Decision and in the Annual Financial Decision;

3. Transparency, accuracy and sound governance in the project management.

Long-term commitment

On average, for investment projects, the MIP support was equal to 7.5% of the total project cost. For most projects, the other 92.5% is financed by the Member States. With this low MIP co-financing, the EU "additionality" and thus the accountability that it could create in the Member States, is naturally limited. The national political decision to support the project until completion is much more important than the fact that the project receives EU co-financing.

Nevertheless, the political context created around the TEN-T and its priority projects, as well as the peer pressure from other participants in European meetings, were important factors in influencing national level decisions. The Member States encouraged each other to implement their projects on the national territory. Generally, MIP/TEN-T projects are high on the political agenda compared to purely national transport infrastructure projects.

For projects that received ***significant*** MIP co-financing (studies and cross-border projects), there was a stronger accountability based on the financial assistance of the MIP. Considering the rate of 20% that cross-border projects could receive (since 2004) and the significant cost this could involve, the EU money was a decisive factor for launching and continuation of such projects.

Compliance with the project planning

As already stated, foreseeability increased under the MIP framework for projects that complied with the project planning. If projects performed worse, there was a risk that they would lose part of their MIP support. For studies, this could be problematic because of the higher financing rate (up to 50%). Therefore, we can argue that project promoters tried as much as possible to stick to the planning.

However, the planning of infrastructure projects throws up difficulties in respecting the yearly timetables. Technical problems often occur and budgets and timetables are often underestimated. Recent studies have analysed this phenomenon by explaining why the costs of large-scale projects, such as High Speed Rail projects, new motorways, and the Channel Tunnel, systematically turn out to be higher than what was forecast. Explanations for the systematic cost overruns include

unfounded optimism and also deliberate tactics: the lower the costs presented, the higher the chances of securing support for the project. This is called 'inverted Darwinism' by Professor Flyvbjerg of Delft, or 'survival of the unfittest', because the projects that look best on paper often have the largest cost overruns and demand shortfalls[27].

Sound project governance

In order to monitor the accountability among beneficiaries, the Commission imposes monitoring procedures. Some Member States also have stricter procedures than those imposed by the Commission. In all cases, Member States and promoters try to comply with the EU regulations in parallel with their national project management procedures. This sometimes creates two reporting procedures. However, as a general rule, the management procedures do not increase the Member States' accountability to the Commission as the projects' progress is not influenced by the existence of these procedures.

Regarding this last point, there is evidence that the impact of the Commission on the management of the projects within countries would be greater if the rules were communicated with more clarity to the Member States.

We can illustrate this statement with two concrete examples:

1. The rule on measuring the performance of the projects (50%-70%) was not fully understood by the Member States or project promoters. This may be due to the (lack of) prominence with which it was published. While in 2002 this rule was in the core text of the Annual Financial Decision, in the following years it only appeared in Annex 2 of the Decision, and only reappeared in the core text of the Framework Decision in 2005.

2. In the Annual Financial Decision for 2001 we find the following article: "cost may be measured in different ways in order to take account of the variety of relevant accounting systems established in Member States". This article disappeared as from 2004 and the definition of acceptable cost measurements thereafter is implicitly that of the Commission. However, several Member States did not notice this change and did not adapt their accounting systems to this requirement.

5.2.3.3. PROMOTION OF PPP'S

Before examining the extent to which MIP was able to promote PPP solutions, we present some elements in order to better define and understand the notion of PPP.

Definition and types of PPP

The Green Paper of the Commission on PPPs defines then as "forms of cooperation between public authorities and the world of business which aim to ensure the funding, construction, renovation, management or maintenance of an infrastructure or the provision of a service".[28]

According to the EIB, "the key feature of a PPP is that it involves a risk sharing relationship between public and private promoters, based on a shared commitment to achieve a desired public

27 Flyvbjerg, B. *Truth and lies about mega projects*, 2007, Delft. http://www.tudelft.nl

28 Commission of the European Communities, 2004, *Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions*, COM(2004) 327 final, p.3.

policy outcome" and "PPP is a generic term for the relationships formed between the private sector and public bodies often with the aim of introducing private sector resources and/or expertise in order to help provide and deliver public sector assets and services. The term PPP is, thus, used to describe a wide variety of working arrangements from loose, informal and strategic partnerships, to design, build, finance and operate (DBFO) type service contracts and formal joint venture companies."[29]

PPP's tend to share the following common characteristics:

- Relatively long relationships, involving cooperation between the public and private partners on different aspects of a planned project;
- Funding structures that combine private and public funds;
- The economic operator playing an important role at each stage in the project (design, completion, implementation, funding) with public partner concentrating on defining the objectives to be attained;
- The distribution of risks between the public and private partners according to the respective ability of the parties concerned to assess, control and cope with this risk.

A distinction is generally made between contractual and institutionalised PPPs. Contractual PPP models are multiple and they differ in the relative role taken by both partners. Differences are also visible between models applicable to new projects and those applicable to existing services and facilities. In the transport sector, the extent of transfer of the demand risk to the private partner is a key feature of the model. Availability-based payment by the public partner (Design Build Finance Operate/Maintain contracts) or toll payment by infrastructure users (concession model) are the two extreme models but a partial transfer of demand risk can also be implemented in models based on shadow-tolling[30]. Institutionalised PPP's involve the establishment of undertakings held jointly by both a public and a private partner in order to perform public services. Hybrid forms of PPP exist that combine elements of both contractual and institutionalised PPP's.

While there is a long tradition of involvement of the private sector in transport infrastructure under the form of concession models, especially for road infrastructure, the PPP approach in other transport modes and with other types of arrangements has developed slowly and in an erratic way over the last 15 years. This trend has accelerated in recent years, making transportation the largest area of PPP investment. Even though transport PPP projects have been developed in many European countries, the initiatives are sporadic and have mainly focused on toll-road programmes.

Findings on the effectiveness of the MIP in promotion of PPP's

Within the sample of evaluated projects supported by the MIP, only PP306 (studies and construction of the international section between Figueras and Perpignan of the Madrid-Barcelona-Perpignan-Montpellier high-speed link) is co-financed via a PPP. During the period 2001 – 2006, also few other sections of the overall infrastructure projects that were not financed with MIP money, were

---

29 European Investment Bank, 2004, *The EIB's role in Public-Private Partnerships (PPPs), p2.*

30 A Shadow Toll System consists of a concession awarded to a private contractor who has then the responsibility to Design, Build, Finance and Operate (DBFO) a road section for an agreed period of time. One of its special characteristics is that the Administration will pay the contractor on an annual basis depending upon the volume of traffic using the road. The term "shadow tolling" is used as there are no visible tollbooths and the users do not actually pay charges to the operators.

financed via a PPP. Examples are the superstructure of the Dutch part of the PBKAL (PP201), sections of the Ireland element of the Ireland/United Kingdom/Benelux Road Link (PP1301) and sections of the Finnish part of the Nordic Triangle (PP1204).

Given that only one project in our sample was co-financed by MIP and PPP, and that there are several examples of Priority Project sections where PPPs were developed without co-financing of the MIP, it is clear that the MIP as such was not an effective tool to stimulate PPP's.

There are several reasons for this finding:

1) Before a project is fit for PPP, it has to fulfil specific criteria described below.

    a. Its subject has to be a distinct and clearly identified part of an infrastructure. The PPP contract should cover, in a comprehensive way, all works related to a part of the network in order to delineate clearly the responsibility of the private partner and be able to apply a payment system based on performance, and reduce the "interface risk" between this part of infrastructure and other parts.

    b. A short term realisation of four to five years maximum because the payment of the unitary charge only starts when the infrastructure becomes available. This means that the private partner has to pre-finance the works.

    c. Limited or at least controlled risk during infrastructure works. Specific clauses capping the transfer of construction risk can be introduced in the PPP contract to accommodate for specific construction risks. These risks can also be mitigated by commissioning studies (soil stability, pollution, etc.) to assess them properly;

    d. The risk of latent deficiencies when the project includes the modernisation of existing assets. New infrastructure investment is much better suited for PPP than the refurbishment of existing assets.

    e. The use of proven technology, as this lowers the risks to postponement of project steps during to construction phase.

When these criteria are compared with the MIP-supported projects, it is clear that only a few of them meet the criteria.

2) In addition, the large majority of MIP projects are railway infrastructure projects focused on new infrastructure or on the upgrading of main lines. The implementation of this particular type of project under PPP faces specific constraints:

    a. Construction works on lines in operation are spread over a long period of time to minimise traffic disruptions. The PPP model foresees that payments to the private partner start only when the infrastructure become available for transport services, and the private partner may not be able to raise funds with such a long grace period.

    b. The design and construction of most railway infrastructure components are subject to detailed standards. Standardisation over a network brings also economies of scale and increased efficiency in maintenance operations. In these circumstances, it is often difficult to specify the procured infrastructure in terms of objectives / performance and little room is left to the private partner for innovation. This removes an important potential benefit of the transfer of construction risk to the private partner.

    c. In all cases that are not strictly limited to the building of completely new infrastructure, the risk related to latent deficiencies may either make the project non

bankable or may cause the private partner to include a substantial risk premium in its bid.

3) To the extent that the financial viability of large infrastructure projects and in particular rail projects is limited, private investors are reluctant to invest money anyway. This is enhanced by the tendency for the demand risk to be too high to interest a private partner.

Very few Member States impose a formal procedure to decide on the choice of procurement options (conventional vs. PPP) on basis of qualitative or quantitative (Public-Private Comparator) criteria. Hence, in the majority of investments, the selection of the optimal procurement route is not formally considered and feasibility studies do not even consider the use of PPP.

The funding of feasibility studies through MIP is only beneficial to PPP when the outcome of these studies could potentially reduce the risks of the project (e.g. traffic studies when transfer of demand risk is envisaged, soil testing for the transfer of construction risk, etc.).

The MIP financing can have a positive impact on creating a PPP approach, as it signals a higher level of commitment of the public partner to the project and may therefore reduce the perceived political risk associated with the project. On the other hand, in some Member States, the availability of MIP financing has a "crowding out" effect on alternative sources of financing such as PPP as the MIP lowers the need from the public authorities to look for alternative funding.

5.2.3.4. FLEXIBILITY / SMOOTH AND TIMELY FINANCING

When evaluating the **flexibility** of the Multi Annual Indicative Programme (MIP) we analysed whether the MIP was able to take unforeseen technical or financial events into account.

Where the non-MIP Annual call procedures allowed project financing by project activity, the MIP procedures are based on the extent to which the activities have utilised the annual budget. This implies that non-MIP activities can be postponed from one year to another without having to consider the risk of losing budget granted, whereas MIP activities cannot be postponed without this risk. This difference is the main reason why the MIP is less relevant for bringing more **flexibility** to the financing of large infrastructure works.

The granting of the support for six years has to be evaluated at the beginning, in order to be formalised in a Framework Decision. However, even for large infrastructure projects, project promoters have difficulties to plan, in detail, project phases in a yearly framework and six years in advance. If, during project implementation, important changes are decided and planned activities change by more than 20%, promoters have to ask for an amended decision, which is a heavy administrative procedure. This lack of flexibility tends to negate the increased ex ante foreseeability.

Every year, even though the Framework Decision is in place, supported activities must be described in an annual financial decision. If a project is running slower for unforeseen technical or financial reasons and spent only, for instance, 60% of the foreseen eligible costs in year t, the project does not receive the total planned support in year t+1 according to the (50%-70%) rule described above. The same rule applies if the project is performing well: it can be awarded in one year the support foreseen in the two following decisions. Nevertheless, some Member States did not understand this rule and did not apply for two decisions in cases of good performance. This contributed to a perception that MIP does not stimulate high performance, but only "punishes" under-performance.

Another element of non-flexibility was the fact that projects could not benefit of a new decision if two former decisions were still open. This rule was logical in case of successive project part but raised some issues for projects composed by several parallel parts[31].

On the positive side, certain flexibility mechanisms were introduced in the course of the programme:

1. If a project runs well during year N, the project can receive in year N+1 the awarded support foreseen in N+1 and N+2.

2. As from 2004, the Commission could take the decision to let the project open more than two decisions at the same time for the same project part/stage.

3. Before this revision, some project promoters experienced informal flexibility as the Commission tried to be as flexible as possible. For example, projects were allowed to have more than two annual financial decisions open if they had already sent the request for final payment under at least one of the decisions.

4. Compared to annual calls, the annual financial decision adoption process does not require the submission of detailed applicant forms, the selection process and the discussion of the decisions at the TEN-T FAC. These steps were a heavy and therefore long administrative procedure for both Member States and Commission.

5. There have been two revisions that were not foreseen at the beginning, allowing for a redirecting of support to well-running projects.

6. There is the opportunity to amend Annual Financial Decisions if proposed activities for support change by more than 20%. Although this opportunity is merely considered as contributing to the inflexibility.

However, the above flexibility mechanisms did not reach the maximum of their potential. Neither the initial administrative rules nor subsequent changes were always well understood by the Member States (for example some Member States claimed not to know that as from 2004, they could open more than two decisions). The two revisions that redirected funds to well running projects were not foreseen at the beginning and their impact was thus reduced.

The procedural lack of flexibility, combined with the low awareness of the flexibility mechanisms, had a significant impact on the way that projects were planned and on the view that the Commission had on the projects as a whole:

1. postponement of project steps can have an impact on funding received. Therefore, beneficiaries propose conservative planning. They want to avoid bringing risks into the

---

31 From 2001 to 2004, only two decisions could remain open by projects. This means that for instance in 2003, even if they have well performed, projects that still have open decisions for 2001 and 2002 cannot get the decision 2003 except if they have already sent the request for final payment for one of the two previous decisions. If one project has 3 distinct projects parts that are organised in chronological order, this rule should not be a problem, activities supported under decision 2001 should be finished or at least, their payment should be requested in 2003. But if these project parts include activities that are supposed to be implemented in parallel, project could have two decision open at the same time in 2001 and at the end of the year, not to be in a position to get new AFD in 2002 given the fact that no claim for payment has been introduced yet for the AFDs 2001.

projects (e.g.: use of new technology such as ERTMS) or are reluctant to propose a more ambitious project planning;

2. second the MIP support is calculated as a percentage of the proposed eligible costs and not as a percentage of the total project costs. Therefore, the beneficiaries tend to propose in the AFD only the minimum amount of eligible costs necessary to receive the approved funding. As a consequence, the Commission has no view on the overall total project cost;

3. third, the description of the cost-types in the application form does not follow a well-established nomenclature. Therefore, project promoters tend to describe the planned work (to-be-supported activities) as broadly as possible in order to create the necessary flexibility and avoid the risk to have to ask for an amended financial decision in case of changes. Consequently, the Commission has no detailed view of the supported activities. As an example, the following table is a sample of different cost types showing inappropriate formulation.

Table 13: Cost Types and Description of Activities

Problem in the formulation of cost types by Member States	Description of the activities
Too general activity	• Other • Activity 1 • Main works • Horizontal issues • Construction
Detailed by section	• Travaux de Seine – Oise • Stockholm Södra • Helsinki-Riihimäki • Wigan to Spring Branch • Section Nîmes-Montpellier-Perpignan
Unclear formulation	• NBS W-U IV 5001 01 • DB S & S • Use of FS materials • Travaux FIAT 197 • LOT 3 OO.CC. EX IRTI

We can see in the above table that it is not easy to clearly understand the purpose and progress of the project at Commission level on the basis of this type of information.

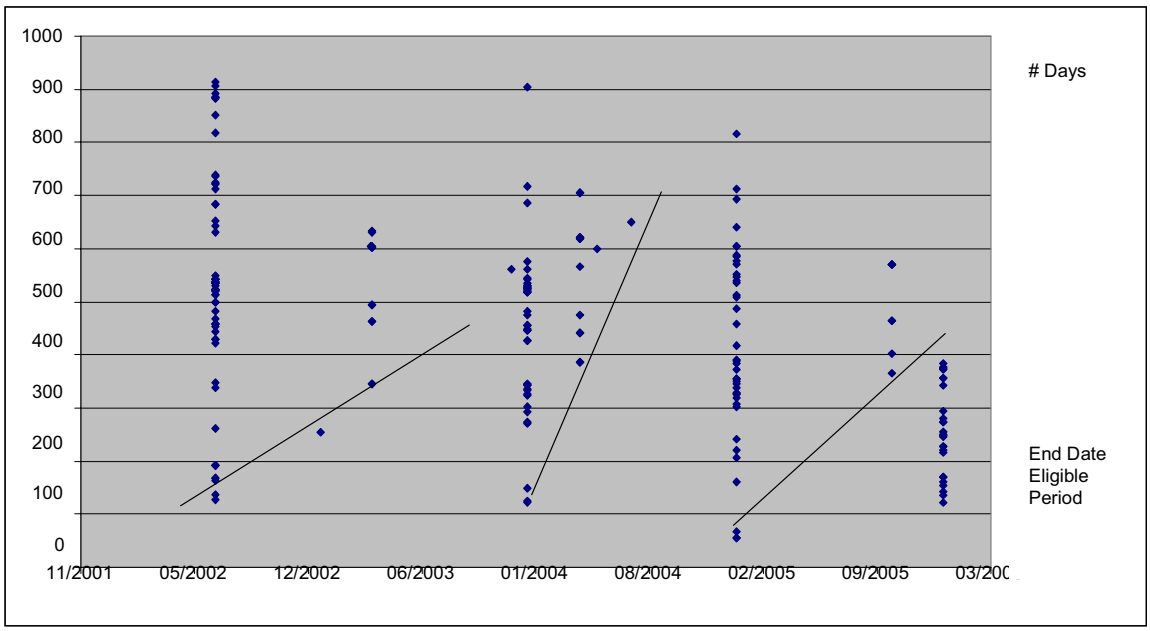
When evaluating the **smooth and timely financing** provided by the MIP, we considered whether the MIP was able to guarantee a stable financing flow.

On average it took 15 months (469 days) between the end-date of the eligible period and the date of the final payment. For example, one final payment was executed on 24/10/2003, for a project whose eligible period closed on 30/06/2002.

The main reason for this is the weighty control process that requires the beneficiaries to submit a detailed list of all the corresponding invoices and, for the Commission, to check a sample of invoices in detail. The control of the Commission also includes the time-consuming difficulty of linking an invoice to the cost-type in the application form. Having both the Member State and the Commission dealing with an arduous administrative procedure naturally creates a long payment period.

In the Figure below we give a view on the time expressed in number of days (y axis) between the end-date of the eligible period (x axis) and the date of the final payment.

Figure 4: Smooth and Timely Financing



There were four main end-dates of eligible periods: June 2002, December 2003, December 2004 and December 2005[32]. The position of the points in the Figure indicates the number of days it took between the end-date of the eligible period and the final payment. There is a large variance in the

32 During the evaluation project, the projects with an end-date of the eligible period in 2006 were not yet paid in 2007. Therefore, the payment date is not known.

number of days between these two milestones, due both to the Member States and to the Commission. Because it is never certain when the Commission will give the order for the final payment, the working capital requirement of the project becomes more uncertain. This has an impact on the Member State's accounting and can delay or affect the planning cycle of other projects.

5.2.4. RELEVANCE

Assessing relevance addresses the question: "were the objectives of the MIP in line with the needs of the beneficiaries. These objectives are:

- to improve foreseeability
- to improve accountability;
- to mobilise public and private financial resources (PPP's);
- to provide some flexibility and to award smooth and timely financing for the most sizeable of the projects.

We conclude this section by examining whether or not there was a clear need for EU financing.

5.2.4.1. FORESEEABILITY

Based on the fieldwork, we can say there is a real need for more foreseeability and certainty in the financial support received from the Commission for the priority projects under the TEN-T. Compared to the non-MIP financing procedure, the creation of the six-year budget view offered to beneficiaries is a step forward in terms of ex-ante foreseeability.

A recent study showed that large infrastructure works have an average cost overrun of 30%[33] that can reach 40% in railways projects[34]. This risk-level makes all financing that can bring more foreseeability welcome particularly for studies, which are financed at 50%, and cross-border projects, which have been financed since 2004 at 20%.

For investment projects where MIP funding rates are lower, the main other source of financing of these projects is national funding which is also a foreseeable financing source, since the political decision has been taken and implementation work has begun. Nevertheless it comes from the interviews that the existence of MIP funding protected the projects from political decisions to stretch projects in periods of budgetary austerity.

We can therefore say that the increase of foreseeability generated by the MIP is mainly relevant for studies and, to a lesser extent, cross-border projects.

---

33 FLYVBJERG, B., "Truth and lies about megaprojects", 2007, Delft.

34 Procedures for Dealing with Optimism Bias in Transport Planning, British Department of Transport, 2004

5.2.4.2. ACCOUNTABILITY OF THE BENEFICIARIES

The question of the relevance of the accountability should be understood as the need for beneficiaries to be accountable for the EU money that they receive. Indeed, beneficiaries usually recognise that good governance requires beneficiaries to be accountable for EU money.

As a consequence, the Commission for its own reporting (and vis-à-vis the European Parliament and the Court of Auditors) needs reliable data and information to show that the EU money was spent supporting the European economy and social cohesion.

The MIP set up several monitoring and reporting tools in order to collect information on the evolution of the projects, the absorption of the budget and to justify expenditures[35]. Nevertheless, these tools allow the Commission to have only a limited view of the projects cofinanced by the MIP. In fact, there were several constraints which prevented the Commission from an accurate view on the projects as a whole, thus hampering complete and detailed reporting on the real situation. These constraints included:

1. The MIP co-financed some activities each year in the context of an Annual Financial Decision (AFD). These activities corresponded to eligible costs and not to the total cost of the project. Depending on the project, the eligible costs can be close to or far from the total cost. The Commission did not generally know the latter; nor did it have information on the overall progress of the overarching project.

2. The MIP management relies on the AFD monitoring within a Programme Management System (PMS). During the programming period 453 AFD's were produced. The PMS allows the monitoring of each AFD individually but is a complex tool for consolidating all the AFD's relating to a single project, even though the budget as defined in the Framework Decision is defined at project level (and not at AFD level). Moreover, the project is itself a part of a more general project on which European Commission has no clear information.

3. Staff turnover at the Commission makes it difficult for officials to have a clear view of the project history, the obstacles that it met, and its political milestones.

As a consequence, the data at the Commission's disposal via the management tools are not sufficient to have a clear view of the projects and to allow complete reporting from the Commission side. Regular visits to the field by desk officers and auditors are necessary to supplement the information and to improve the Commission's view of the project.

5.2.4.3. PROMOTION OF PPPS

Many Member States consider they do not need to finance infrastructure projects using PPP for the following reasons:

- they consider the construction or maintenance of the priority projects to be their core business and are reluctant to outsource it to a private partner;

- PPP would require complex coordination, monitoring and regulation to ensure conformity with safety standards;

35 These tools and their effectiveness are described and analysed under Theme B.

- the culture of using PPP's for public investments is more embedded in certain Member States than in others.

As noted, the level of knowledge, awareness and understanding of PPP in the Member States is highly variable. It should also be noted that project promoters may see PPP as an attack on their vested interest. The European Commission does have a role to play, and could play this through the MIP, in raising awareness and the level of knowledge and disseminating best practice in a structured fashion.

5.2.4.4. FLEXIBILITY / SMOOTH AND TIMELY FINANCING

When we look to the characteristics of the projects co-financed via the MIP, we see there are in most cases long term, complex and large infrastructure works. These infrastructure works have a high risk of postponement of activities (as stated in the chapter on effectiveness). Per definition and as confirmed in our fieldwork, we can say this type of projects have a profound need for flexibility.

5.2.4.5. NEED FOR EU FINANCING

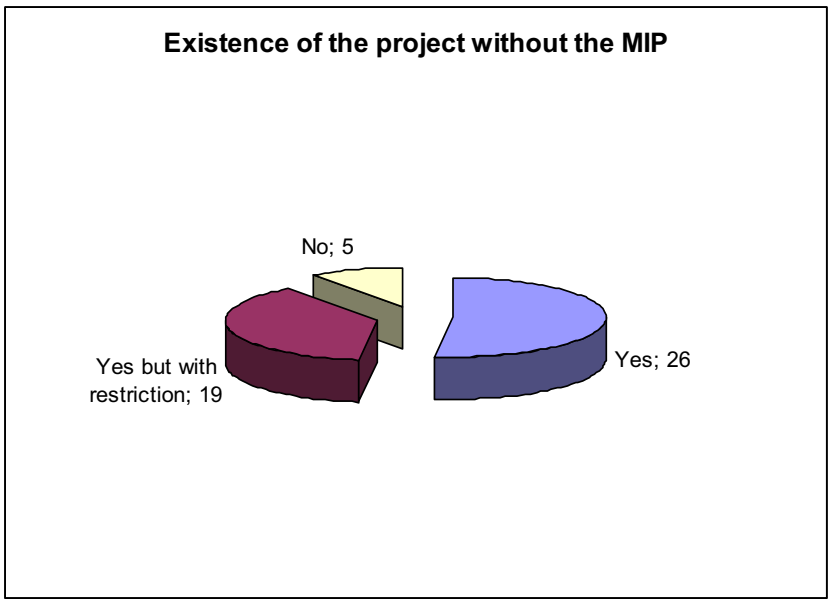
The principle of "relevance of need for EU financing" in the context of the MIP financing means that:

1. The Member States and project promoters express a need for EU financing as a necessary complement to their national financing;

2. The MIP financing is additional to the national financing in order to reach the TEN-T objectives and to go beyond pure national interest as part of a wider EU policy agenda.

In order to evaluate the extent to which these criteria were met, we have used the information coming from the application forms and our interviews with project promoters. Very few project promoters accept, when completing the application, that their project could go ahead without MIP support. However, we obtained strikingly different results during the interviews, as shown in the Figure below.

Figure 5 : Existence of the project without the MIP



Further explanations are needed in order to qualify the statements in the Figure:

1. More than half the projects we looked at would have gone ahead without the financial support of the MIP. That means that the national authorities would have carried out these projects in any case. Nevertheless, the MIP was useful, not really for the amount that it provided to the project (an average 7.5% of the investment), but for the pressure that it put on the political decision makers. In practice, the MIP rules force strict planning timetables on project promoters; and political and peer pressure from the EU and the other Member States means that TEN-T projects progress more rapidly than they might otherwise have done.

2. Many project promoters considered that their project would have existed without the MIP but that they would have suffered from certain restrictions. As stated above, timeframe issues would have arisen or the financial risk would have been greater. The size of their project would sometimes have been different. For example, they would not have implemented the new traffic management systems (ERTMS).

3. For some projects, the MIP financing provided a real impetus to get the project going. That means that without EU sponsorship and the European dimension that it gives, national authorities might not have carried out the project because the national interest and the economic viability were not decisive.

Even if the MIP did not support infrastructure projects in their implementation phase with large amounts of money, the promoters are generally interested in continuing to apply for MIP financing as it gives them the opportunity to be part of the general framework of the TEN-T. In practice, therefore, the EU political dimension of the TEN-T and the signalling function of the MIP were more valued than the MIP financial assistance

As a conclusion, we can state that for many projects (mainly investments) there is no real financial need for the Community funding through the MIP, which at the same time gives a significant impetus to the decision making and place the project higher on the political agenda. In that context, the MIP is valuable in order to reach European objectives which go beyond the national interest.

This being said, for investment projects of high national interest that would be implemented without support, the relative support of the MIP could probably be smaller and nevertheless play its role of impetus with better efficiency, while focusing most of the support on cross-border projects that would not happen otherwise.

5.2.5. IMPACTS

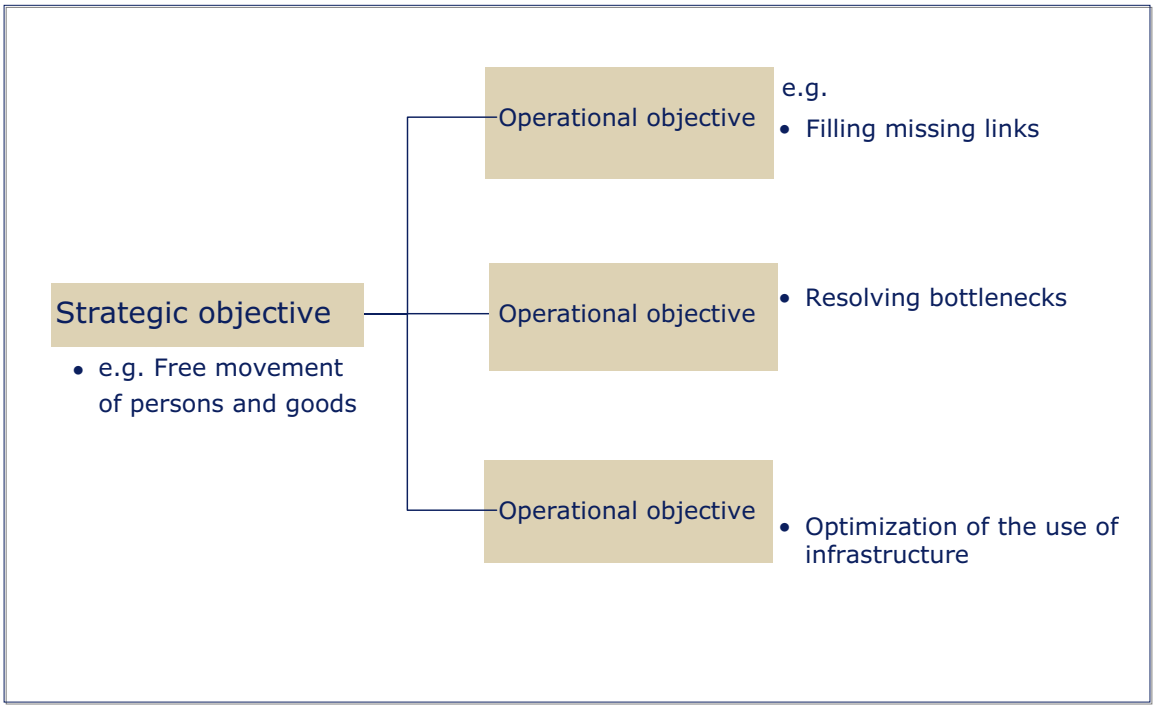
5.2.5.1. GENERAL OVERVIEW

We understand the concept of the impact as the contribution of the MIP and, as a consequence, the contribution of the co-financed projects to the objectives and priorities of the TEN-T.

In order to define causality effect between different levels of objectives, we have distinguished “Strategic objectives” from “Operational objectives”. By “TEN-T strategic objectives” we mean the objectives and priorities that respond to transport infrastructural needs expressed at EU level. The

"TEN-T operational objectives" are the objectives and priorities that have to be fulfilled in order to reach these strategic objectives in a logical way [36] (see Figure 6).

Figure 6: Logic Tree: Strategic/Operational Objectives



We differentiate each objective and some into several sub-objectives. Some objectives in the TEN-T guidelines are very broad (objectives taken directly from the Treaty for instance) and cover different aspects that have to be examined individually. For instance the objective "to stimulate socio-economic development" includes several socio-economic dimensions such as employment, free movement of persons and goods, EU competitiveness and social cohesion. For the sake of our analysis, we decided thus to consider the different dimensions separately and merge our main findings in the conclusions in order to give a general overview of interlinked objectives.

Two types of indicators and several information sources were used for analysing the impacts of the MIP projects on the TEN-T objectives:

- Qualitative indicators from interviews and desk research: the information we have collected concerns evidence on the specific contributions of each project to the TEN-T objectives;
- Quantitative indicators from our database: the information we have used concerns mainly data describing the financial investment of the MIP in the TEN-T strategic objectives and the number of projects that used these funds in order to specifically contribute to these objectives.

[36] Reviewing and establishing the full intervention logic of the TEN-T was not included in the scope of our study; nevertheless for the sake of our approach, we have tried to re-organize the objectives and priorities in order to ease the reading and the comprehension of our impact analysis.

Some preliminary remarks are needed here:

- For some of the projects (namely all the PPs), the contribution to the objectives and priorities of the TEN-T should be relatively clear, as all the PPs have been identified by the Commission and the Member States as projects contributing in priority to the establishment of the Trans European Network for Transport;

- A number of the projects that we have examined in our sample were related to studies (38% of the AFD's); by themselves, studies only contribute indirectly to the achievement of the objectives and priorities of the TEN-T. But the investment projects (even if not yet started), that the studies aim to prepare and analyse, should contribute to these objectives and in that context their expected contribution can also be assumed. This approach relative to the "expected" contribution has been based on the analysis of our interviewees' perceptions[37].

5.2.5.2. LIMITATION OF THE APPROACH

We only evaluate in this chapter **trends** in the contribution of the projects to the TEN-T objectives. Indeed several limitations hamper our ability to identify properly (and in a fact-based way) the contribution to the TEN-T objectives:

1. As already stated, taking into account the fact that projects are not yet started, not yet finished or have only recently been completed, there is no quantitative indicator revealing impact of the projects on the objectives and priorities of the TEN-T. Of 50 projects included in our sample, only 12 are actually in operation (see table below).

Table 14: Projects in operation

Ref	MS	Title	Starting date/comments
PP101	DE	Berlin Railway node: measures in Lehrter Bahnhof and Bahnhof Papestrasse stations (now the Hauptbahnhof and the Suedkreuzbahnhof); upgrading of Südkreuz-Ludwigsfelde and Sudkreuz - Blankenfelde sections	May 2006, but it should be noted that this is only the very northern segment of the line running south from Berlin.
PP102	DE	High-speed railway link Nuremberg-Munich: construction of new Nuremberg - Ingolstadt section: upgrading of Ingolstadt - Munich section	May 2006 (Nuremberg-Ingolstadt); December 2006 (Ingolstadt-Munich). It should be noted that this will ultimately be part of the Berlin-Italy link.
PP401	FR	European TGV East (TGV Est Européen): Construction Phase I (Vaires - Baudrecourt)	June 2007

37 As explained in chapter 4.Methodology, we were unable to use the Project appraisals for this.

Ref	MS	Title	Starting date/comments
PP402	DE	Railway link Paris – Eastern France – South Western Germany: upgrading of section Ludwigshafen – Saarbrücken – German-French border for high-speed traffic	Major milestone was launch of high-speed connection between Paris and Frankfurt on 10 June 2007. However, the upgrade to speeds of 200 km along all stretches will not be complete until 2013.
PP607	IT	Enhancing the productivity of infrastructure and technologies in order to increase the fluidity of East/West traffic (the Pioltello-Treviglio and Rovato-Padua sections).	2006, but it should be noted that these are only two segments of the line from Milan to Venice-Mestre.
PP608	IT	Reorganisation of the Venice/Mestre railway junction	2006, but this is only one part of the Milan to Venice-Mestre link.
PP1204	FI	Nordic Triangle/Finnish part: E18 Motorway, construction of Paimio-Muurla and Helsinki Ring III sections	Sections co-financed by the MIP are finished but the whole motorway will not be finished until 2015.
PP1301 (A-C)	IE	Planning and design of Ireland element of the Ireland/United Kingdom/Benelux Road Link	Some motorway sections are in operation; the whole motorway should be completed in 2010.
PP1302	UK	A120 Stansted to Braintree road upgrading	Motorway (24 km) has been in operation since in 2004. The ex post evaluation will be finished in October 2007. The whole road axis will be finished in 2013.
GR1001	AT	Danube railway axis: construction of Enns bypass and Rohr freight bypass	April 2007
GR1019	IT	Node of Rome: construction of the high speed urban junction.	Work was finished in 2005 but the full impact will not be felt until the whole high speed line has been completed and the appropriate rolling stock is available.
GR1025	FI	Removal of bottlenecks on the railway network in Finland: Luumaki - Joensuu and Oulu - Iisalmi/Vartius sections	Completed in 2006 but the complete renewal will not be finished until 2009.

2. As some projects were exclusively composed by studies or focused on a small part of a bigger coherent project, they did not have *per se* an impact on the TEN-T objectives and priorities.

3. Objectives and priorities of TEN-T are defined in broad terms summing up various EU strategies and legislation such as the Lisbon Strategy or the Goteborg Strategy or the European

directives relating to the environment protection[38]. This tends to lead interviewees to declare that their project was contributing to at least one of these objectives.

4. There is no shared and common understanding of certain concepts such as "bottlenecks" or "sustainable mobility", leading to a lack of comparability in the discussions.

5. "Competition" between the objectives exists, as projects have to comply with objectives in matters of environment, social cohesion, development of the internal market, economic development including employment and so on.

6. We have not been in a position to use eventual studies done by the project promoters with regard to the potential contribution to the TEN-T objectives and priorities as these were either non-existing (at least the quantitative approach) or organised in such different ways that an overall comparison would have deemed to be useless.

5.2.5.3. OPERATIONAL OBJECTIVES

In order to contribute to the strategic objectives of the TEN-T, the MIP projects must aim at several operational objectives listed in the TEN-T guidelines. These objectives should be reached quickly after the project completion:

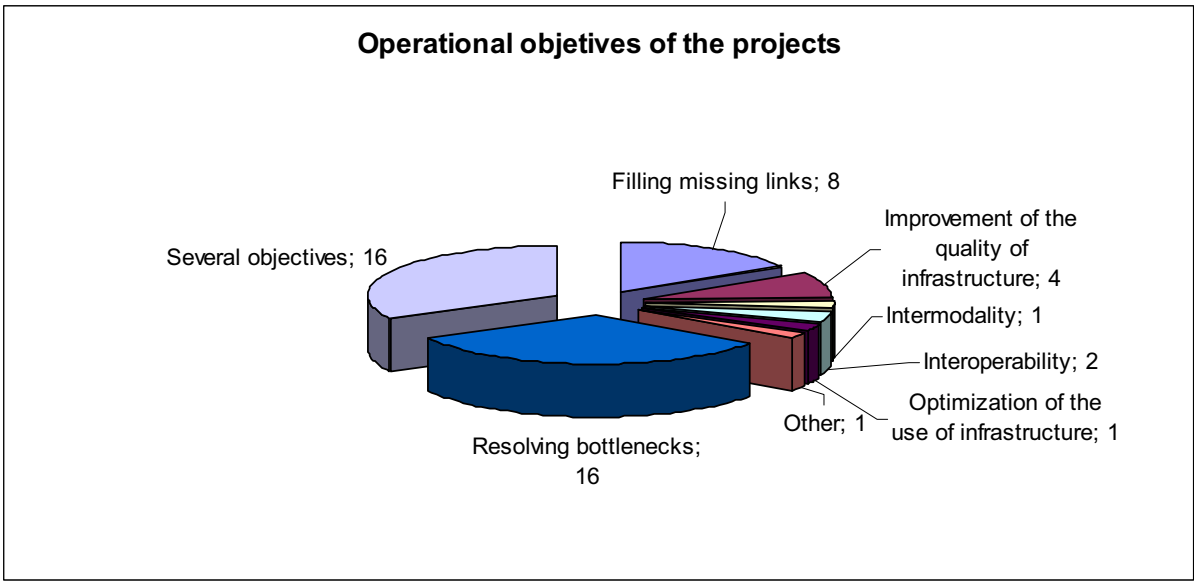
Table 15: TEN-T operational objectives

TEN-T Operational objectives	
Interoperability	Filling missing links
Intermodality	Optimisation of the use of infrastructure
Improvement of the quality of infrastructure	Resolving bottlenecks

As a first qualitative indicator, we conducted an analysis of the extent to which the project aimed at contributing to the TEN-T operational objectives. The Figure below gives the distribution of the main operational objective to which the projects intended to contribute (based on responses during interviews). If the projects were studies, we inquired about the long term objective of the overall underlying project. We obtained the information for 49 projects out of our sample of 50.

38 Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment and , Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

Figure 7: Main Operational Objectives of the Projects (one per project)



We can see that many projects aimed at fulfilling 'several objectives' at the same time. Indeed, many projects could logically contribute to **several objectives**, for example:

- Upgrade of the existing infrastructure because of bottlenecks due to speed limitation (e.g. railways infrastructures in Finland – GR1025);
- Fill a missing link with intermodal shift. (e.g. construction of the international section between Figueras and Perpignan of the Madrid-Barcelona-Perpignan-Montpellier high-speed link which includes a project of rolling motorway – PP306;
- Mix new links with upgrading of existing infrastructure in order to speed up passenger and freight traffic (e.g. High-speed railway link Nuremberg – Munich – PP102).

Also, many projects are regarded as having the resolution of **bottlenecks** as a main objective. However, as stated above, we noticed during our interviews that a bottleneck could be understood as a section in the transport network where the journey time is too long and not specifically as a zone where there is too much traffic.

Nevertheless, we can assume that projects will have an impact on local bottlenecks that will improve the circulation on the network as a whole. This is the case, for instance, when considering projects such as the Brenner base tunnel (PP104) on the axis from the Nordic Triangle to the south of Europe, or the tunnel below the city of Malmö in Sweden (PP1201) that will improve access to the Øresund Bridge and increase its use.

Eight projects out of our sample are considered to have as main objective the network completion by **filling missing links**. These links have indeed a singular impact on the TEN-T, particularly when they are cross border or improve the access to cross border infrastructures. This is the case for instance for the completion of the PBKAL in the United Kingdom (PP202) that should improve the use of the Channel Tunnel, or the Eastern High Speed Line from Paris to Germany (PP401).

Four projects have as main objective the **improvement of the quality of the existing infrastructure**. Although these projects consist sometimes of works in existing railways that could be defined as technical maintenance, they should improve the use of railways instead of road thanks

to the journey time decrease and capacity increase. In Ireland, the state of the railways network was in a very bad condition at the beginning of the 90's and thanks to the MIP and the Cohesion funds, commuters can now use renewed line and modern multimodal shift stations. The whole PP9 deals with the elimination of a number of key permanent speed restrictions along the Belfast – Dublin – Cork Intercity Rail Corridor.

Very few projects consider the **interoperability** and **intermodality** issues as well the **optimisation of the use of the infrastructu**re as a primary operational objective. This could be understood by the fact that these objectives are not considered as objectives *per se* but as part of a larger objective or as a means to rely on in order to reach the operational objectives.

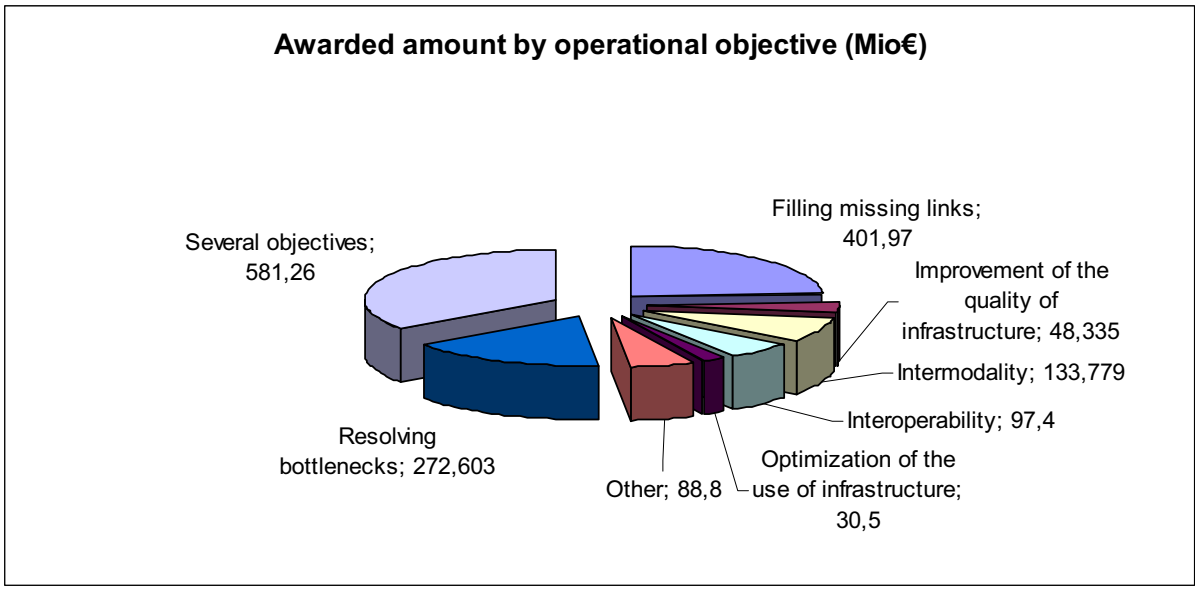
Only the international section Lyons – Turin (PP603) has **intermodality** as main operational objective, as road congestion and dramatic accidents such as the accident in the Mont Blanc Tunnel in 1999 are obliging the public sector to find structural and environmentally friendly solutions. In this context, rolling motorways are a possible solution. The Perpignan Figueras Tunnel (PP306) also aims at developing a rolling motorway but interoperability issues were a real challenge and are thus considered as the main operational objective.

In the Figure below, we give an overview of the amount awarded for each operational objective during the period of the MIP 2001-2006[39]. We can see that most of the MIP money was awarded to projects dealing with missing links and bottlenecks. This is to some extent normal as the previous Figure showed that 24 out of 49 projects of our sample had the creation of missing links and the resolution of bottlenecks as first objective.

We can also see that the objective "Filling missing links" was more budget-consuming than the objective to resolve bottlenecks. For our sample, about one third of the awarded amount was awarded to these projects during the programming period. This is because the projects to resolve bottlenecks are very large scale. If we consider the cross-border projects across natural barriers and new high speed lines crossing sizeable countries, the MIP can be seen to have pushed forward these types of project in order to produce impacts on the TEN-T as soon as possible.

39 The source for the amounts is the Annual Financial Decisions of the projects in our sample.

Figure 8: Amount invested in each operational objective



5.2.5.4. STRATEGIC OBJECTIVES

In this section we look at the two main strategic objectives of each project in our sample. Considering the fact that the projects are not finished (or finished, but without producing tangible indicators due to their recent completion), we analysed their expected impacts (as for studies). As we collected the information through the interviews, the projects' objectives are updated compared to what was said in the project appraisals.

We have distinguished eight strategic objectives in the TEN-T guidelines.

Table 16: TEN-T Strategic Objectives

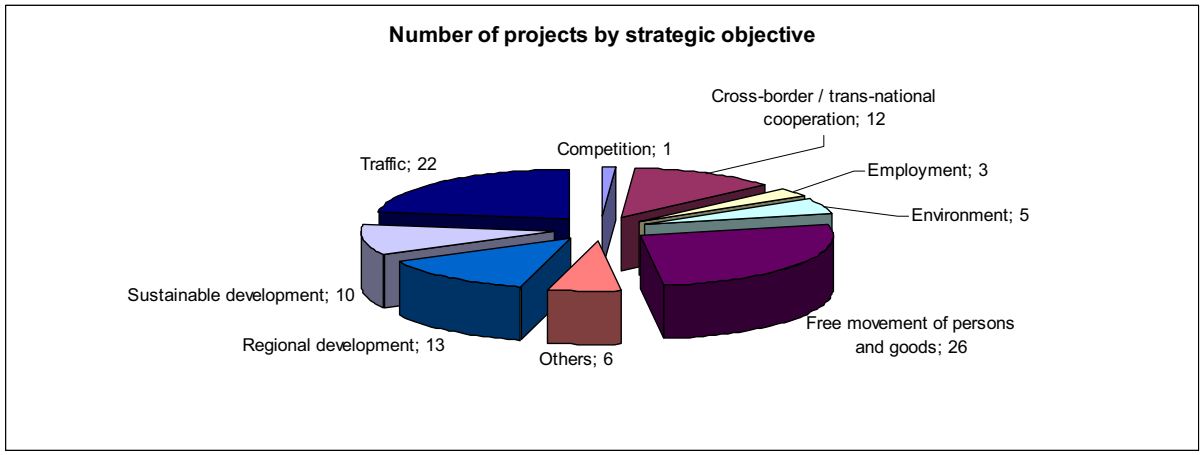
TEN-T strategic objectives	Comments
Regional development	The TEN-T aims at opening up regions that are not or under-equipped with high quality transport infrastructures. This is key for the development of enterprises in less developed regions through the increase in workers' mobility, freight transport and regional dynamic image.
Employment	In the context of the Lisbon Strategy that aims at raising the overall employment rate in the European Union to 70% and the female employment rate to more than 60% by 2010, the TEN-T could significantly contribute to these objectives. TEN-T can impact direct and indirect job creation both during the project implementation and when the transport infrastructure is in operation.
Environment	The EU environment policy aims to preserve, protect and improve the quality of the environment. Transport activities are particularly pointed out and, for several years, the EU pushed

TEN-T strategic objectives	Comments
	further the application of the mainstreaming of environmental protection in this policy. The TEN-T has a significant role to play by urging Member States to apply EU environmental principles such as the "polluter-payer" one.
Sustainable development	The EU Sustainable Development Strategy (SDS) implies that in the long run, economic growth, social cohesion and environmental protection must go hand in hand. The singular aim of this strategy is to consider the links between the three dimensions and to correct imbalances. The revised TEN-T guidelines (2004) particularly underlined the sustainable development as a key principle for a modern transport system.
Traffic	Chronic congestion issues at local level such as bottlenecks are factors that significantly hamper development of a European network of transport. The White Paper on sustainable mobility for the EU[40] emphasizes the responsibility of the EU to find solutions to traffic issues that have an impact at local level and slow the European traffic down.
Competition	High quality transport infrastructures in all Member States are key elements for fair competition between the Member States but also with the rest of the world.
Free movement of persons and goods	Mobility of goods and persons is an essential component of the competitiveness of the European industry and services. Railway transport can contribute to both passenger and goods transport and the EU has a significant role to play.
Cross-border / trans-national cooperation	The TEN-T guidelines underline the necessity of completing missing links between Member States. These links do not have a major impact for countries from both border sides but they are part of EU priority axis. Considering costs of such missing links, natural barriers are mainly concerned.

We interviewed Member States and project promoters on the basis of the above list and identified the two main strategic objectives of each project. We show this qualitative result in the Figure below.

40 Communication from the Commission to the Council and the European Parliament - Keep Europe moving - Sustainable mobility for our continent - Mid-term review of the European Commission's 2001 Transport White Paper COM/2006/0314 final

Figure 9: First and second expected project impacts on the TEN-T strategic objectives



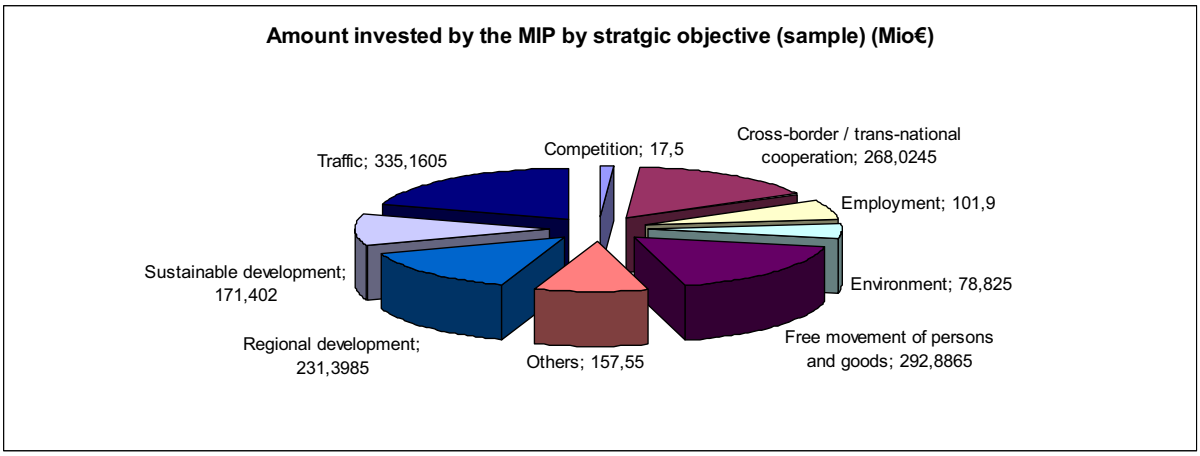
The following objectives are most frequently targeted by the various projects co-financed by the MIP:

- Free movement of persons and goods;
- Traffic;
- Cross-border/transnational cooperation;
- Regional development;
- Sustainable development.

Of course, these objectives do not stand by themselves but are part of a national socio-economic strategy.

We have also calculated the amount invested by the MIP in each strategic (sub)objective (see Figure 10). It gives us the opportunity of balancing the previous Figure based on the number of projects aiming at contributing to a specific strategic objective.

Figure 10: Total amount invested by strategic objective



As a quantitative indicator, we have used the total awarded amount to each project. We can see that the objectives regarding: traffic, free movement of goods and persons, cross border / transnational cooperation and regional development have received most of the funds.

The potential impacts that the projects (could) have on the objectives of the TEN-T are as follows:

1) Free movement of goods and persons

Railway solutions for freight transport are increasingly investigated in many Member States in order to improve the quality of road traffic and to stretch the delivery distance out in due time. New links and upgrading of existing railway infrastructure to high speed circulation are realised throughout the EU with the aim of improving the passenger traffic. High speed lines are not *per se* designed for freight transport, but relieve the secondary or classical network that can than be used for freight transport.

Traditionally mainly goods with low added value have been transported by rail. As a consequence, freight transport by rail corresponds to 10% of total freight transport and 22% of international freight transport in 2005[41]. We can assume that rolling motorway solution and high speed train for passengers (the major part of the MIP projects) will have a significant impact on the goods transport in EU.

Moreover, if we consider the current debates on the opening of the market for international rail traffic as of 2010 (and maybe earlier), the pressure is on the Member States to offer quality infrastructure and collaborate with other countries in order to significantly develop the TEN-T in the coming years. Journey times have to be guaranteed both for passenger and freight transport for fear of having to pay compensation in case of delays.

2) Traffic

Solutions for traffic congestion at national or local level are well supported by Member States. Both road and railway infrastructures are concerned by these projects. The impacts of such projects are

41 Eurostat data

first of all on the national network where we consider the quality of life of the users and environmental issues for people living around the transport infrastructures. Projects such as the construction of a new A120 highway from Stansted to Braintree (United Kingdom – PP1302) have a significant impact on the traffic alleviation on the secondary road network. This is also the case for the upgrading of the road axis between Cork-Dublin-Belfast (Ireland - PP1301) that previously ran through villages and generated accidents. On a higher level, both projects will create significant capacity increases and allow much faster journey times on the United Kingdom/Ireland/ Benelux road axis for passengers and freight (TEN-T priority axis 13).

As a consequence many projects targeting traffic congestion will improve local and national traffic firstly. The improvement of the circulation on the European axis of which they are a part should be considered as an indirect effect.

3) Cross border / transnational cooperation

We can make a distinction between two types of projects that have an impact on transnational cooperation:

1. Cross border sections that, as missing links, will have a direct impact on the cross border exchanges and on the opening of the EU corridors;

2. Projects that will allow for access to these cross border (international) sections.

Both of them are of course complementary and should be conducted at the same time in order to produce as much impact as possible. Nevertheless, we have noticed that in the most cases cross-border sections are well supported by the Member States and the EU – through higher focus from all parties and higher MIP financing (up to 20% with the 2004 revision and up to 30% as from 2007) – but the projects involving access to the cross border sections (mainly tunnels) face delays for political or technical reasons. It is complex to synchronise both construction phases, even more so because each Member State is individually responsible for its own access to the cross border" section.

Nevertheless cross border projects are not always located in mountains or on (or under) the sea. In this case connection between national networks is easier but interoperability issues (e.g. compatibility issues between two traffic management systems) could occur. In order to solve these obstacles, clear political decisions and substantial investments are needed.

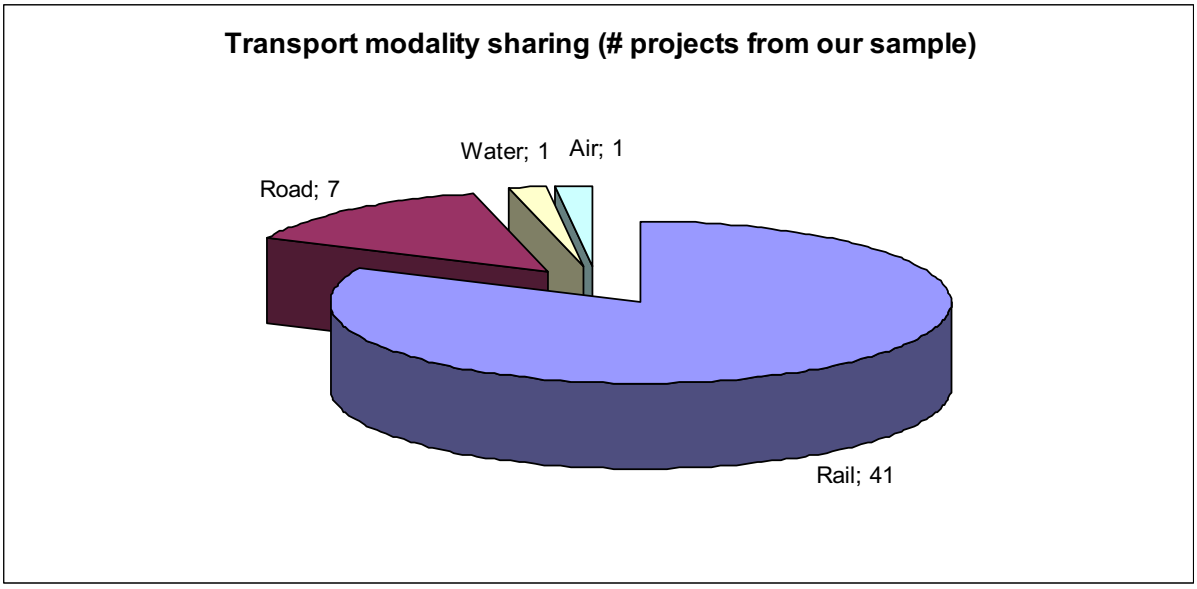
Considering the current obstacles to the cross border project completion, we can assume that they will not have significant effects in the medium term.

4) Sustainable development / environment

Environmental concerns are increasingly addressed in infrastructure projects. Our interviews and document analysis showed that sustainable development is becoming an objective *per se.* Under the EU impulse but also because of Member States' political decisions, significant investments have been made in high speed railway.

The MIP mainly finances rail transport. Only in regions with no motorways or with major safety problems did MIP money finance the construction of motorways (e.g. in United Kingdom, Ireland, Greece, and Finland). No upgrading of existing motorway was co-financed by the MIP. The Figure below presents the transport modality sharing among the MIP projects.

Figure 11: Transport modality sharing among the projects



Given air transport's sensitivity in terms of being a sustainable mode of transport, very few air projects received MIP financing.

5) Regional development

MIP projects have an impact on regional development in some Member States. This is for instance the case with Castilla La Mancha-Valencia Community-Murcia regions that will be integrated into a fully operable trans-European high speed rail network (GR1009). The export (mainly vegetables and fruit) from these regions would be more efficient as a result.

Another type of regional impact that could be noticed among the projects is the settling of inhabitants in low populated areas thanks to new railway lines and stations. "TGV Est" (PP401) in France should allow for regional development between Paris and the German border thanks to two stations on the high speed railway axis East. This is also the case for projects aiming at easing the access to the economic centres, with high workforce demand around capitals and big cities (e.g. motorway to Dublin - PP1301 – and railway to Helsinki - PP1205).

6) Employment

Few projects aim at creating jobs as an objective but we can assume that the projects cofinanced by the MIP will create thousands of jobs. These jobs will be created at different levels:

1. During the implementation phase: billion euros projects produce significant number of jobs. There is no complete data on this number because project promoters use subcontractors for the construction work and do not have a clear view on the exact number of people involved in this work;

2. In the operational phase: considering that in 2004 the transport services sector employed about 8.2 million people in the EU-25[42], new transport infrastructures in all the Member States will create many direct jobs in maintenance, exploitation, traffic management, train driving…

3. Around the transport infrastructures: many indirect jobs will be created for services to travellers for purposes such as taxis, shops and catering.

4. By the use of the transport infrastructures: fast interregional and international transport connections will advance the right to free movement of workers.

7) Competition

To our knowledge, no project has been analysed in terms of its quantifiable impact on the competitiveness of Member States (intra-EU or vis à vis the rest of the world). Nevertheless, it is self-evident that improving European transport infrastructure and performance is a key element to contribute to these objectives. In addition, there is the important dimension of the transport networks connecting EU-12 and the neighbouring states - and onward to Asia.

In order to develop the European Union's external trade and to improve the transit conditions, Member States located at the EU borders such as Finland express the need for developing transport connections with third countries, Russia in this case. Political and EU financial support could be improved, as recommended by the High Level Group on TEN-T led by ex-Commissioner Karel Van Miert in 2003.

5.2.5.5. CONCLUSIONS

When looking at the current framework of TEN-T development, MIP projects with strong impacts at national level are not surprisingly those which will be completed in the short term. The main aims of these projects are:

1. To fill missing links between big cities and isolated regions;

2. To solve bottleneck issues constituted by nodes around and in large cities;

3. To upgrade existing infrastructure where circulation is particularly slow.

Generally speaking, these projects will mainly have an impact on the traffic at national level. This is not, in our sense, a limitation to the TEN-T objectives of optimising the exchanges between national networks, but rather a first and necessary step towards this objective.

Nevertheless, the improving of the national transport network should be realised in parallel with links between national networks in order to produce significant impacts on the TEN-T objectives. During the MIP programming period 2001-2006, political agreements were reached between several countries: Belgium, the Netherlands, France, Spain, Italy, Germany, Denmark, Ireland, the United Kingdom… Many cross-border links are now in the project phase or even in the implementation phase. We envisage that major cross border links will produce major impacts on the European network in the horizon of 2010-2015.

42 Eurostat data.

Based on our project analysis, the impacts that the projects will have are mainly on:

- Free movement of persons and goods;
- Traffic;
- Cross-border/transnational cooperation;
- Regional development;
- Sustainable development.

We can thus argue that the socio-economic objectives (including employment, regional development, social cohesion…) of the TEN-T should be significantly impacted by 2015. No strong evidence based studies exist and compilation of partial project data is the basis for this but after the programming period we can say that many projects that are running well have socio-economic concerns.

During the programming period (and increasingly towards the end), the MIP also put a sharp focus on development of the internal market by supporting projects that support cooperation between the Member States in a global sense. In that context, the increase in the cross border co-financing (up to 30% for the next programming period) and the appointment of European coordinators for some priority projects are perceived as important factors for the TEN-T development. Nevertheless, when considering the cost of such cross border projects and the TEN-T available budget, many Member States involved in these projects are worried about the fact that the EU will not support their project as much as they would need. As a consequence, precautions are taken by the Member States in project planning and implementation to avoid rushing into large scale infrastructure projects with reduced EU financial support.

Last but not least, sustainable development objectives are being more and more integrated by Member States in developing their transport network infrastructures. The MIP with its selection criteria and environmental obligations on projects (such as the obligation to perform an environmental impact study 5 years after the project completion) played a major role in this. In general, the Member States give preference to the railway development instead of road both for TEN-T projects and their own national transport projects. Even though, in parallel with railway development, air traffic continues to be increasingly developed with the creation of new airports and the extension of small regional airports, few of them are cofinanced by TEN-T money.

5.2.6. EFFICIENCY

When assessing the efficiency of the MIP, we looked at the following questions:

- to what extent the financed projects (studies and works) were economically or financially viable;
- to what extent objectives have been achieved at a reasonable cost. Regarding this question, the projects co-financed by the MIP are not generally far enough advanced or were completed[43] too recently for updated impact indicators in relation to the TEN-T objectives to be available. Most projects that were nominally completed during the programming

43 Within our sample, 12 projects out of 50 are already in operation.

period did not produce indicators because they are part of a broader project that is not yet completed;

- to what extent MIP procedures have been efficient. This assessment is presented under Evaluation Theme B: Management.

5.2.6.1. FINDINGS

All **infrastructure** works that are financed by the MIP are the result of a political decision to undertake the project. As all infrastructures are owned by the Member States or a state company, the prolongation of the lifecycle of the infrastructure is or will be a political decision.

The government can take different parameters into account when deciding on the prolongation of an infrastructure. The most important are economic viability, financial viability and public interest. Whereas the first two parameters are measurable, the later is more difficult to define.

However, in the quantitative data collected on the evaluated projects, there was usually no profitability indicator[44]. The main reasons for this were either that:

- the nature or size of projects did not justify studies to define the profitability indicators; or

- the culture of defining clear profitability indicators is not yet well established.

In the table below we provide an overview of all the profitability indicators we identified.

Table 17: Overview of the profitability indicators received per project (amounts in million €)

Projects	Net Present Value (Mio €)	Benefit/Cost ratio	Internal Rate of Return (%)	Pay back period (in # years)	Actual or Foreseen Number
AT GR3001	990,80	NA	10,20		Foreseen
AT PP103	5957,00	NA	5,00	50	Foreseen
DK GR3009	2000,00	NA	7,00	25	Foreseen
IT PP 608	65,00	NA	9,00		Actual
IT GR1019	-24,80	NA	0,95		Foreseen
IT PP604	1050,00	NA	7,00		Actual
IT PP104	-1623,00	1,30	2,33		Actual
BE PP204	NA	NA	6,00		Foreseen
FI PP1204B	NA	2,70	NA		Foreseen
FI PP1204A	NA	1,50	NA		Foreseen
FI PP1025B	NA	2,00	NA		Foreseen

We can see that the cost-benefit ratios are overall significantly higher (always above 30%) than the internal rate of return (IRR) (always below 10.2%). This conclusion is an indication of the important difference between economic viability (assessed by cost-benefit ratio) and financial viability (assessed by IRR) of large infrastructure projects. The c/b ratio also takes into account the external economic effects, such as the creation of indirect employment, decrease in traffic accidents and traffic jams, etc. The IRR only measures the financial benefits the project will be able to generate and does not take external economic effects into account. If financial viability is used as the main input for decisions on the project, only a few projects will be prolonged after the intervention of the

44 Of the 36 financial tables we received, 11 of them contained one or more profitability indicators.

MIP. In fact, governments tend only to take economic viability into account. Moreover, if the economic viability is not positive, government may decide to continue a project because of the public interest.

For **studies**, efficiency is more difficult to define as there is no data assessing the financial or economic viability of the studies that were undertaken. Also, the public interest of studies can be very high (e.g. environmental impact assessments) but very complex to measure. The subject of a study is often to investigate whether or not to continue with a project or to change the scope of a project. To the extent that the result of the study is taken into consideration, the study obviously has its effect on a longer term.

5.2.6.2. CONCLUSIONS

As illustrated by the low number of profitability indicators we received from the Member States, there is a need to stimulate a culture in Europe to calculate these indicators for every large infrastructure project - and for a consistent approach to their calculation[45]. Creating a culture and having a consistent calculation of the parameters, however, does not imply that only projects with positive profitability indicators should be executed. Clear public interest criteria will usually play the strongest role in such decisions.

Initiatives and methodologies already exist in order to harmonise cost-benefits analysis:

- HEATCO, DG TREN initiatives in order to develop Harmonised European Approaches for Transport Costing and Project Assessment;
- Railpag,, a joint EC-EIB initiative in order to harmonised procedures for rail project appraisal and suggests best practices for applying cost-benefit analysis to rail projects;
- The Guidance on the methodology for carrying out cost-benefit analysis of DG REGIO for programming period 2007-2013.

One of these methodologies should be chosen and its use should be generalised for future cost-benefit analysis of transport projects.

5.2.7. SUSTAINABILITY

Sustainability is the interaction between environment, economy and society. As for the efficiency, the fact that projects co-financed by the MIP are not or too recently completed limits the findings regarding this question.

At TEN-T level the following objectives and priorities are directly related to sustainable concerns:

- to ensure the sustainable mobility of persons and goods within an area without internal frontiers under the best possible social and safety conditions, while helping to achieve the Community's objectives, particularly in regard to the environment and competition, and contribute to strengthening economic and social cohesion;

---

45 Initiatives and methodologies already exist in order to harmonise cost-benefits analysis. We can mention:
- HEATCO, DG TREN initiatives in order to develop Harmonised European Approaches for Transport Costing and Project Assessment;
- Railpag,, a joint EC-EIB initiative in order to harmonised procedures for rail project appraisal and suggests best practices for applying cost-benefit analysis to rail projects;
- The Guidance on the methodology for carrying out cost-benefit analysis of DG REGIO for programming period 2007-2013.

- to offer users high-quality infrastructure on acceptable economic terms;
- to be, insofar as possible, economically viable;
- the optimum combination and integration of the various modes of transport;
- integration of environmental concerns into the design and development of the network.

One can suppose at this stage that MIP projects are in line with these objectives, specifically in terms of environment, if one considers the part of railway projects that have been supported.

5.3. Theme B: Assessment of the management of the TEN-T MIP

5.3.1. EVALUATION JUDGEMENT CRITERIA AND LIMITATIONS OF THE APPROACH

In order to assess the management of the TEN-T MIP, we have analysed:

1. the effectiveness and efficiency of the MIP procedures including the programme planning, the selection procedures, the follow-up procedures and the financial management;

2. the influence of the 2004 changes in the guidelines and the procedures on overall MIP management;

3. the influence of the MIP procedures on the performance of the projects in comparison with the performance of the projects supported under the TEN-T annual calls.

The data that we have used for evaluating MIP management come mainly from the analysis of the interviews that we conducted with, on the one hand, those in the Member States responsible for MIP management and project promoters (the beneficiaries) and, on the other hand, Commission officials dealing with the management of the MIP. In terms of the financial data at our disposal which are used as quantitative indicators, comprehensive data was made available to us on the MIP projects. However, no structured data was made available on the non-MIP projects, so that we did not have the same comprehensive picture.

As our information source is mainly stakeholder opinion, we have overlaid the various statements in making a judgement in order to highlight common viewpoints and to avoid biased assertions.

We conclude the evaluation of the management of the MIP with considerations on the added value of the MIP procedures for the beneficiaries in terms of transfer of good practice.

5.3.2. EFFECTIVENESS AND EFFICIENCY OF THE MIP PROCEDURES

The evaluation of the effectiveness and efficiency of the MIP means that we have to analyse the following questions:

1. How far have the MIP procedures contributed to achieving the objectives of the MIP in terms of support to achievement of the objectives of the TEN-T?

2. Are the MIP mechanisms for implementation both optimal and cost-efficient?

In this section we will have a more detailed look at whether each procedure met its objectives and was thus individually effective. The question in terms of efficiency is: would it have been possible to reach the same results at less cost, i.e. with different procedures? In this section, we approach MIP procedures in this way.

We have gathered the various MIP management tools and procedures into four sections:

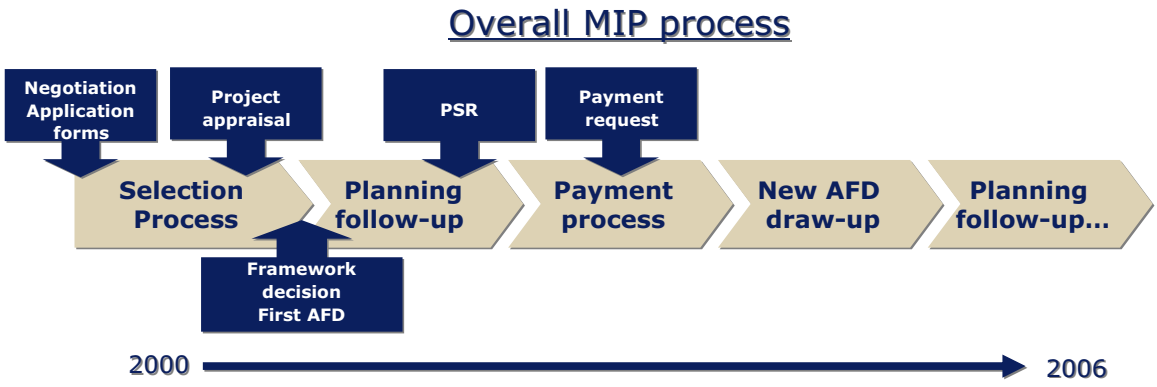
- Planning;
- Selection procedures, application forms, and project appraisal;
- Follow-up procedures including the PSR;

- The financial regulations, including payment request and technical reports.

We will analyse each procedure[46] by considering the beneficiaries' view and the Commission view.

By way of introduction, the overall MIP process is presented in the following Figure.

Figure 12: Overall MIP process



5.3.2.1. PROGRAMME PLANNING

One of the objectives of the MIP in comparison with the previous financing support was foreseeability. Each project supported may receive a predefined amount each year providing they stick to the planning timetable as stipulated in the 2001 Framework Decision[47] and detailed annually in the financial decision (AFD). They receive the amount awarded in the financial decision, and may start the process for the next AFD if the activities envisaged have been realised and progress has been reported.

The MIP follows a six-year planning cycle. Consequently, the beneficiaries had to plan their project activities from 2001 till 2006.

According to our interviews, a multi-year planning cycle creates advantages in terms of effectiveness and efficiency:

1. Beneficiaries know that their projects will be supported each year if their project activities are carried out as foreseen. They do not have to spend time each year in making new applications without knowing if their project will be cofinanced again by the MIP. Moreover, if the project

46 In order to be as possible in line with the Commission explanations, we used for the procedure descriptions the *TEN-T handbook – A practical guide for users*.

47 The 2001 Framework Decision establishes the Indicative Multiannual Programme for the granting of Community financial aid to projects of common interest in the area of the trans-European transport network for the period 2001 - 2006 (C(2001)2654/final of 19 September 2001). This Decision allocates the total MIP amount to the twelve individual projects of common interest and four coherent groups of projects of common interest.

faced delays in one year and did not receive the amount awarded for this specific year, the MIP guarantees that they can continue to receive awarded amount for the next years;

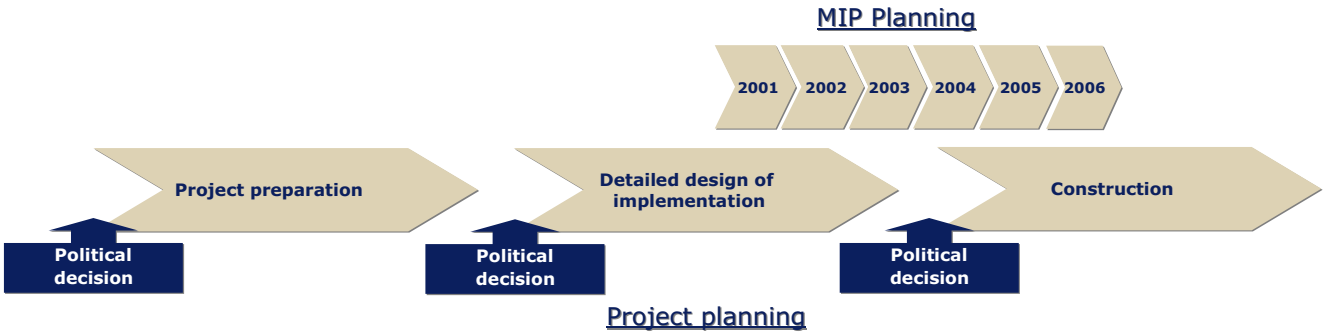
2. The Commission does not have to launch a number of additional annual calls for projects in order to select new projects (such as in the non MIP process), and therefore avoids time-consuming selection procedures;

3. The Financial Assistance Committee[48] (FAC) does not have to be consulted each year in order to obtain its agreement to the proposal for the TEN-T budget. Comitology procedures prescribed by the TEN Financing Regulation provide for discussion with the FAC about the draft Commission proposal for the allocation of funding and supporting documentation. For non-MIP projects, the FAC has to be consulted each year, while for the MIP, for which the project grant is decided once for the whole period, the FAC agreement is only needed for the Framework Decision and for the Revision. This process is less time-consuming.

This planning rule also has disadvantages:

1. According to the beneficiaries, each project follows its own planning cycle independently of the MIP planning. This cycle is longer than the MIP planning cycle, and is generally some 15 years. It generally breaks down into (1) project preparation, (2) detailed design, (3) Construction. Each phase is likely to need a political decision before proceeding to and providing a budget for the next one. The beneficiaries can more or less plan coming activities within one phase, but it is much more complex if they have to plan activities across two phases as presented in the Figure below. There can be a brief or indeed long project freeze between stages which will modify all project planning.

Figure 13: MIP planning and project planning (hypothetical)



2. In order to avoid being overly constrained by detailed activity planning, beneficiaries tend to plan broad activities in which they are left free to include a wide range of various activities. As a consequence, the Commission officials admit that they have trouble comparing the envisaged activities with the actual activities and waste time in obtaining a full picture;

48 Article 17 of the TEN Financing Regulation (EC) No 2236/95) establishes this Committee composed of the Member States and European Investment Bank representatives in order to assist the Commission in MIP implementation. This Committee has a consultative role in relation to financial decisions that have to be taken by the Commission concerning the MIP.

3. National planning systems vary. Some of them coincide closely with the annual MIP planning, while others do not run on a calendar basis but on the basis of *tranches*. Beneficiaries from these countries artificially have to cut their project tranches into short parts in order to stick with the MIP annual planning framework.

It is possible to conclude, as a result – and as our interviews have shown – that the MIP planning cycle is well suited to projects that can absorb funding and easily achieve the annual expenditures envisaged. Considering that large scale infrastructure projects regularly face delays for technical or political reasons, the project planning is often modified. This has negative repercussions in the MIP context because beneficiaries have to obtain an amendment to the Financial Decision or the amount they were awarded is lost. This is paradoxical because the intention of establishing the MIP was to support effectively projects of common interest that faced implementation obstacles. An "indicative annual guarantee" such as the MIP provides could be an incentive for implementation of the projects, but would not prevent all delays for technical or political reasons.

5.3.2.2. SELECTION PROCEDURES

As noted above, the MIP selection procedures differ from the previous systems by selecting all projects of common interest from the beginning of the programming period (2001). With such a system, no further project applications are needed for the projects during the programming period. The exception was the MIP revision (2004), when new projects were incorporated in the MIP list and when some projects were withdrawn from the list due to the fact that they did not start Twenty-two new projects were selected during this phase.

According to the Council Regulation laying down general rules for the granting of Community financial aid in the field of trans-European networks[49], projects should have been selected on the basis of eligible criteria:

1. Selection criteria used to assess the applicant's ability to complete the proposed action in accordance with the work programme:
    a. Stable and sufficient sources of funding;
    b. Professional competence and qualifications required to complete the action.
2. Award criteria used to assess the quality of the proposals submitted. Various criteria are appraised by the Commission:
    a. Relevance to the common transport policy;
    b. Contribution to sustainable development;
    c. Added value of Community funding;
    d. Maturity of the projects:
    e. Stimulative effects of Community intervention on public and private finance;
    f. Soundness of the financial package of the project;

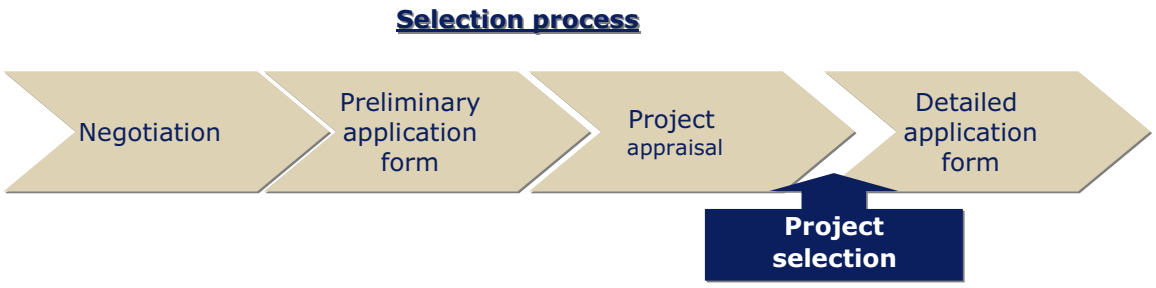
[49] Council Regulation laying down general rules for the granting of Community financial aid in the field of trans-European networks (EC) No 2236/95

g. Socio-economic effects;

h. Environmental impact.

These criteria had to be detailed by the applicants in application forms. After a first "informal" and bilateral negotiation between each applicant and the Commission, a first agreement was reached on a group of national projects. These projects were then individually and formally detailed in a preliminary application form. The project was then appraised by the Commission, which then forwarded a selected project list and the budget allocated to the TEN-T FAC for approval. Then, detailed application forms had to be drawn up for the selected projects. These forms were used as a basis for the Framework decision and the first AFD. During the rest of the period, beneficiaries did not have to produce a detailed application form to open a new AFD. Only the project status report (PSR) was needed.

Figure 14: MIP selection process



This procedure applied only at the beginning of MIP. With the 2004 revision and for the new programming period (2007-2013), the project appraisal is only based on the detailed application form.

In the following sections, we analyse each stage in the selection process with the aim of assessing whether they are effective and efficient.

Stage 1: Negotiation

Informal negotiations were held before the formal project applications were lodged which were aimed at pre-identifying the project before completing time-consuming application forms. In that sense, the negotiation stage was effective because it refined the project list and emphasised projects of a high European interest. The negotiation stage was also a good mean for discussing budget sharing between Member States and stimulated the use of new technologies such as the ETCS (European Train Control System) according to several beneficiaries.

From the point of view of the beneficiaries and the Commission view-points, the negotiation stage was also important because it avoided a loss of time for applicants in filling out applications and for the Commission in weighing their respective merits. The negotiation was also an opportunity to discuss projects with the Commission in order to adapt them to the EU requirements. As the project list was shorter and better fitted European requirements, the Commission gained time during the project appraisal process.

All beneficiaries appreciated this stage and particularly the fact that they had the opportunity to explain their projects and the specificities that determined the project budget. For instance, during the negotiation stage, they were able to explain concretely how project costs were affected by

geographical peculiarities (cost/km). We understand that applicants appreciate these informal negotiations but it has shortcomings in terms of procedural transparency, as it could have created openings for special pleading.

Stage 2: Preliminary application form

The preliminary application form was used as basis for the first MIP project appraisal in 2000. It contained the main information about the project such as

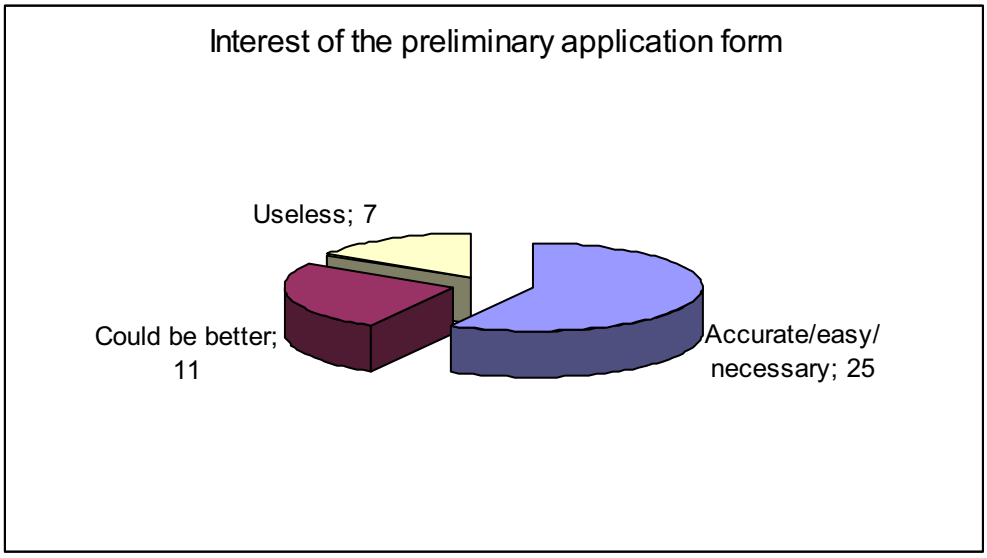
- technical description;
- key indicators that will be used;
- estimated eligible cost;
- timetable;
- support requested;
- general status;
- indicative financial plan.

In terms of effectiveness, we can argue that the preliminary application form actually allowed the Commission to select projects on the basis of this form. Nevertheless, the information contained in these forms was in our view not detailed enough to evaluate concretely the projects and decide whether they met the selection and award criteria. Information included in these forms was generally synthetic and general. It did not, for instance, make it possible to obtain a clear view on the maturity of projects and therefore of their ability to use the annual MIP budget annually, the scope of intervention of the project or the type of activities that were going to be conducted.

As a consequence, detailed application forms were needed to supplement the information from the preliminary application form and make it possible to draw up the MIP Framework Decision as the first AFD. Several documents, such as environmental impact or socio-economic studies, were annexed to the preliminary application forms or later requested by the Commission, but it was in our view very difficult to evaluate applications against the award criteria on the basis of these documents.

In terms of efficiency, it could be argued that the preliminary application was easy to fill in for the applicants, but for the Commission it generated the need to make added requests to the applicants in order to complete the information at their disposal (see appraisal section below). In the Figure below, we present a quantitative analysis of how beneficiaries who know its features viewed the preliminary application form. We gather the interviewees' opinions by project.

Figure 15: Interest of the MIP preliminary application form



As we can see from the Figure, a majority of beneficiaries valued the preliminary application form because it avoided loss of time when combined with the negotiation stage. A significant minority, however, felt it created a duplication of work. It should be noted that the preliminary application form was only used at the beginning of the process, not in the 2004 selection process. It should also be noted that some felt that the preliminary application form could have been used when applying for amendments to AFD's rather than having to fill in a full application form again.

3) Project appraisal

On the basis of the negotiations with the applicants and the preliminary application forms, the Commission selected projects of common interest in order to grant funding from the MIP using a project appraisal form and applying the award and selection criteria listed above. In practice, the emphasis was placed on a certain number of these criteria:

1. Degree of contribution to the TEN-T objectives and European policies;
2. Economic viability;
3. Timing and maturity;
4. Impact on environment and socio-economic development;
5. Financial need.

In order to assess the project appraisal process, we analyse here the extent to which projects that are selected generally meet these main criteria.

1. Degree of contribution to the TEN-T objectives and European policy objectives:

The Commission faced issues when evaluating the specific projects' contributions to the TEN-T objectives because, on the one hand, TEN-T objectives are defined in broad terms and it was complex to specifically attribute projects to one objective (see section 5.2.5 on the

Impact at programme level), and on the other hand, project descriptions in the preliminary application form were sometimes laconic and did not make the link with TEN-T objectives. That does not mean that the projects did not contribute to European policy objectives, but the evaluation of these contributions for each project on the basis of the preliminary application form was difficult and the process can then be considered as having a low effectiveness from this perspective.

2. Economic viability:

In order to evaluate whether projects were economically viable, the applicants had to produce socio-economic indicators such as cost-benefit ratio, internal rate of return and net present value. We note that the projects in our sample have good economic viability ratios (see section 5.2.7 on Sustainability at the programme level). We can thus ex post state that the selection process resulted in the selection of projects that are economically viable. Our interviews indicate that Member States also generally proposed projects that they regarded as economically viable. However, the preliminary application forms and the studies appended to them were not a satisfactory means for the Commission objectively to assess the economic viability upfront. Indeed, some projects were not able to provide this type of indicator because the projects were still in the preparation phase and had still to analyse these aspects in future studies (sometimes financed by the MIP). Moreover, as the socio-economic indicators are not calculated in the same way in all Member States and between different transport modes, these were no basis for arbitration between competing applications, and such comparison could only be indicative. Consequently, the selection procedures were not adequate for ensuring effective selection of economically viable projects ex ante.

3. Timing and maturity:

Projects that are proposed for MIP grants have to be mature as they have to produce proposals for expenditures each year in the framework of a predefined planning schedule. During the project appraisal phase, the Commission had thus to selects project that were ready to consume budget in the short term. Given the fact that 15% of the projects selected in 2001 did not start or progressed more slowly than foreseen during the programming period (43% of the MIP projects absorbed in average 53% of the their awarded amount) and that the MIP had to be revised in 2004 in order to redistribute[50] unspent funds from these projects, it appears that, in fact, a significant number of projects selected were not financially or politically mature, or did not succeed in complying with planning schedules. The project appraisal stage dealt only with those projects which emerged from prior negotiations between the Member States and the Commission as being good candidates for MIP funding. As with many EU discussions, those negotiations had an element of political arbitrage. This limited the Commission's options at the project appraisal stage, with the result that there were problems with the maturity of some of the projects it selected. It should be borne in mind, however, that a 'drop-out' rate of some kind is likely to be inevitable with this type of large infrastructure, and as discussed in the introduction of this section the 2004 revision was one means of dealing with this.

4. Impact on environment and socio-economic development:

Impacts on environment were specifically mentioned in the preliminary application form. The applicants had then to produce status of implementation of relevant environmental

[50] A consequence of this redistribution is that 32% of the MIP projects reached an average absorption rate of 170%.

legislation[51]. The preliminary application forms did not cover socio-economic impacts such as employment, so the Commission was not able to evaluate this as such. The evaluation of the project's socio-economic impact was thus mainly evaluated via the economic viability ratio. The shortcomings of this as an indicator and the implications of that are discussed in 2. above.

5. Financial needs:

Community aid had to be assigned to projects that were potentially economically viable and for which the financial profitability at the time of application was deemed insufficient as stipulated in article 6 of TEN Council Regulation[52]. The financial contributions of the MIP aimed at complementing insufficient state financing and pushing forward projects of common interest. Given that, in our sample, 26 projects of 50 would have been realised without the MIP (see section 5.2.4.5 on the Relevance of the need of EU financing), we can state that the financial needs of the beneficiaries were not so self-evident.

4) Detailed application form

The detailed application forms were used in order to complete the information collected by the Commission during the selection process (negotiation and preliminary application forms) and to enable the 2001 Framework Decision to be drawn up as the first AFD. After that, it was used for the selection process during the 2004 revision when preliminary applications forms were not used. As such it contains further information on the potential effects of the projects on issues such as traffic flows, multimodal plans, and employment, and requires much more detail on the financial dimensions of projects and monitoring tools. These forms evolved over time so that more and more detailed information was sought in order for the Commission to have solid base for the project appraisals.

Our review of the way in which these forms were filled out indicates that this was not homogenous, thus making it complex to analyse them and draw up the AFD. For instance, the activities listed and the cost breakdowns are sometimes mentioned as physical construction from point A to point B, or are sometimes more detailed by defining within the overall project what the MIP will actually support. Applicants did not use a shared activity nomenclature. As a consequence, the Commission faced problems in project follow-up. According to Commission officials', this also created problems for them in dealing with payment requests because they were required to link specific expenditure to specific activity as defined in the AFD. Beneficiaries also complained about difficulty with this, as it did not take into account the complexity of this for them, which sometimes required time-consuming manual intervention or establishing special management systems in order to comply.

On the other hand, the detailed application form did not, in our view, give enough detail on the maturity of the projects. This criterion is crucial when selecting projects within a multi-year programme, but in practice 15% of the projects did not get off the ground and many projects ran more solely than foreseen (43% of the MIP projects absorbed in average 53% of the their awarded amount). The only undertaking sought in the detailed application form was the existence of formal political agreement to the project if the project was not yet under way.

---

51 Environmental impact according to Directive 85/337/EEC as amended by Directive 97/11; effects on "Natura 2000" sites according to Directives 79/409/EEC ("Birds Directive) and 92/43/EEC ("Habitats Directive")

52 Council Regulation laying down general rules for the granting of Community financial aid in the field of trans-European networks (EC) No 2236/95

In order to clarify the whole MIP process, the Commission published a *TEN-T Handbook -A practical Guide for Users* but only in 2004 in the context of the MIP revision.

As a general conclusion on selection procedures, we can state that the MIP selection process succeeded in selecting projects of common interest and was instrumental in advancing these projects. Of the projects in our sample, 20 are now in the construction phase or even (partly) in use (12[53]). This was helped by the fact that the Commission decide to optimise the MIP budget utilisation by withdrawing several projects during the 2004 revision and redistributing the available amount to projects with good performance and by selecting new projects.

Table 18: Project distribution by project phase (sample)

Project phase	Number
Project Preparation	7
Detailed design of implementation	11
Construction	20
Use	12
Total	50

Moreover, it could be argued that the process lacked transparency in clearly demonstrating that the projects met the award and selection criteria, including the criterion on maturity. The failure to identify projects which were fully mature in all cases meant payment recovery procedures, AFD amendments and a MIP revision were needed, and this detracted from the efficiency of the selection process.

5.3.2.3. FOLLOW-UP PROCEDURES

The Council Regulation[54] requires that the Member States should verify that the projects and studies financed by the MIP are properly carried out and subject to effective monitoring in co-ordination with the Commission. The Project Status Report (PSR) is used as the main tool to monitor the progress of on-going projects[55]. The PSRs include data on the technical and financial progress of the implementation of the Annual Financial Decision (AFD) and must be submitted annually.

The Figure below presents the overall project follow-up process.

---

53 These projects are in use but the global projects of which they are part have yet to be completed. As a consequence, the full effects are not yet being felt.

54 Council Regulation laying down general rules for the granting of Community financial aid in the field of Trans-European networks. EC No 2236/95

55 If the activities that are foreseen in the AFD are completed during the year of reference, no PSRs are needed because they are used for on-going projects. In that case only a technical report is needed to accompany the payment request and serve as application for the subsequent year.

Figure 16: Overall follow-up process

Monitoring tools such as the PSR are necessary to enforce transparency in European investment. In this section, we assess whether the PSR was effective and efficient in reporting project data to the Commission in order to have a clear view of the project reality.

The PSR does not match all these objectives: the system indeed allows reporting from the Member States to the European Commission, but we have noted several limitations that mean that the Commission does not have complete information for its own reporting and that slow the overall monitoring process down.

On the beneficiaries' side:

1. The beneficiaries faced problems with the PSR because it changed several times (and requirements increased) during the programming period. These changes had an impact on the information systems set up by the beneficiaries. As a consequence beneficiaries usually waited to receive the PSR template before gathering the information;

2. As beneficiaries often receive the PSR late in the process (they should normally receive the PSR in March and send it back in June), the time they have to complete the PSR is shorter than foreseen and PSRs are sometimes sent in late;

3. The information cycle is different between the various information sources. Beneficiaries that, for instance, are dealing with Structural Funds, State funds and MIP funds have to gather different data and complete different monitoring templates;

4. Some Member States faced language issues and do not understand all PSR items. As a rule, translated documents (application forms, AFD's; etc.) reach beneficiaries late. As the MIP cofinances projects that are financially and technically very complex, the wording used is very specific to each Member State and each item in the Commission documents needs to be clearly explained;

5. As explained in the MIP planning section, projects had to comply as far as possible with the Annual Financial Decision (AFD) mechanism and thus to expend each year the money that was available. Only projects that can prove that they have spent 50% or more of the eligible costs may (partly) access funds under the next AFD. Projects that had not reached this minimum absorption rate when submitting the PSR had thus to wait for the next PSR. This could slow the overall project because activities that were due to be financed with the following AFD could not be carried out when needed.

On the Commission's side:

1. The PSR does not give the Commission a clear overall view of the projects because it is mainly oriented towards compliance with the budget (e.g. invoices issued, payments made, cost breakdown review) and with EU legislation (e.g. on the environment and public

procurement). Moreover, the PSR only covers information on the MIP project and not the progress of the overall project of which the MIP project is generally only one section.

2. The current MIP template does not allow the Commission to consolidate the PSR data into the Commission Project Management System (PMS). Commission desk officers have thus to copy/paste data from the PSR into the PMS. This process is time-consuming and creates the potential for mistakes. Moreover, the PMS does not allow the Commission to have a clear view on overall project progress given the fact that it is organised by AFD and that there is no structural relationship between several AFD's linked to the same project. In other words, the PMS does not allow the Commission to aggregate information from AFD's at project level.

Consequently, the PSR does not satisfactorily allow effective and efficient project follow-up both for the Commission and for the beneficiaries.

As a remark on the overall Commission TEN-T monitoring process, we also underline the fact that the beneficiaries have to comply with several other project monitoring tools in addition to the PSR, such as for instance:

- Technical reports for the payment request;
- Regular financial compliance audits, including visits from the European Court of Auditors in some cases;
- Ex-ante and ex-post evaluations;
- TEN-T implementation reports from the Priority axis coordinators appointment in 2004;
- Field visits from the Commission.

These take much time for the beneficiaries and do not allow unique data collection, structured and established on a solid base of clear guidelines.

5.3.2.4. PAYMENT REQUESTS

The closing of an annual decision should ideally be undertaken annually for MIP Annual Financial Decisions (AFD). In fact, several projects have two or even three open AFDs. Indeed, two (or potentially three) AFDs can be open for a project if a continuation of MIP aid for the next year is sought. Final reports and costs claims must be submitted within 6 months after expiry of the eligible period at the latest.

The documentation that the beneficiaries must send to the Commission includes:

- For studies: a technical executive summary;
- For works: a technical report on the activities carried out;
- An appraisal of the study, and
- A certified statement of expenditure by the government concerned.

The Commission verifies that all conditions have been fulfilled before finally closing the AFD and authorising the final payment. The Figure below presents this presents this process schematically.

Figure 17: Annual Financial Decision closing

Generally, the payment procedure is not perceived as effective by the beneficiaries because they have to wait one year to receive the money and the level of detail of the expenditure is not adapted to the reality of huge projects.

Moreover, some beneficiaries deem that Commission requirements on linking invoice to completion of the job rather than payment is incompatible with domestic requirements and requirements of other EU programmes (Regional Fund), and this can pose major problems. This is also linked to the problem that the some beneficiaries have with linking payments to when the work was performed, not the invoice. As the Commission asks for samples of expenditures based on the statement of expenditure, it requires manual investigation to find the information on invoices on closed accounting years. National accounting systems are not always adapted for such a request. The Commission's approach is also incompatible with the common practice in the case of infrastructure projects of delaying invoicing until there is an overall picture of the project, including claims on the contractor.

On the Commission side, the process for closing a financial decision is complex and time-consuming because the list expenditure received has to be matched to the activities that are included in the AFD. As these activities do not follow a common nomenclature and are sometimes described in broad terms, the exercise is complex and leads to request for added information from the beneficiaries.

5.3.2.5. CONCLUSIONS

Several MIP management procedures are time consuming for both the Commission and the beneficiaries without clearly adding equivalent value. One of the main reasons is that the application forms and the AFD do not provide for a clear description of activities. This has consequences for project follow-up. Desk officers spend much more time in checking that invoices correspond to activities (i.e. they are obliged to be control-oriented) than to operational support for and gaining an understanding of the project (i.e. content-oriented).

Another important reason is changes (e.g. to templates, rules and timings) that constantly occurred during the programming period in the rules and the MIP tools (e.g. application forms, PSR, technical report accompanying the payment request). MIP Guidelines for users were available, but this was not updated to reflect these changes. This lack of coherent information increased the need for additional requests, resulted in ad hoc approach and decreased the possibility of getting an overall reporting document that would easily flow from the control and monitoring system. As a consequence, the transparency and the understanding of the system were not shared among the beneficiaries[56].

[56] The difficulties we faced in finding aggregated information and reporting quantitative information are more evidence of this.

5.3.3. INFLUENCE OF THE RECENT CHANGES ON THE OVERALL MIP MANAGEMENT

In 2004, the Commission decided to amend[57] the MIP Framework Decision[58] in the light of overall MIP progress and changes to the TEN-T Guidelines[59] mainly due to the enlargement. The changes involved:

- New TEN-T guidelines;
- Specific environmental assessment of projects having significant effects on the environment;
- Withdrawing projects not started or delayed from the list of common interest projects;
- A requirement to perform a socio-economic and environment assessment five years after the project completion;
- Management requirements for cross border projects (joint venture with Member States from both side of the border);
- Rise in subsidies to 20% for cross border projects;
- More flexibility in the rule of a maximum of two AFDs per project.

In order to get information on the influence of these changes, we asked beneficiaries[60] what the tangible results of the MIP revision were. The Figure below shows that the most important by far was the withdrawal of projects which had not started (because that enabled them to draw down more funds).

---

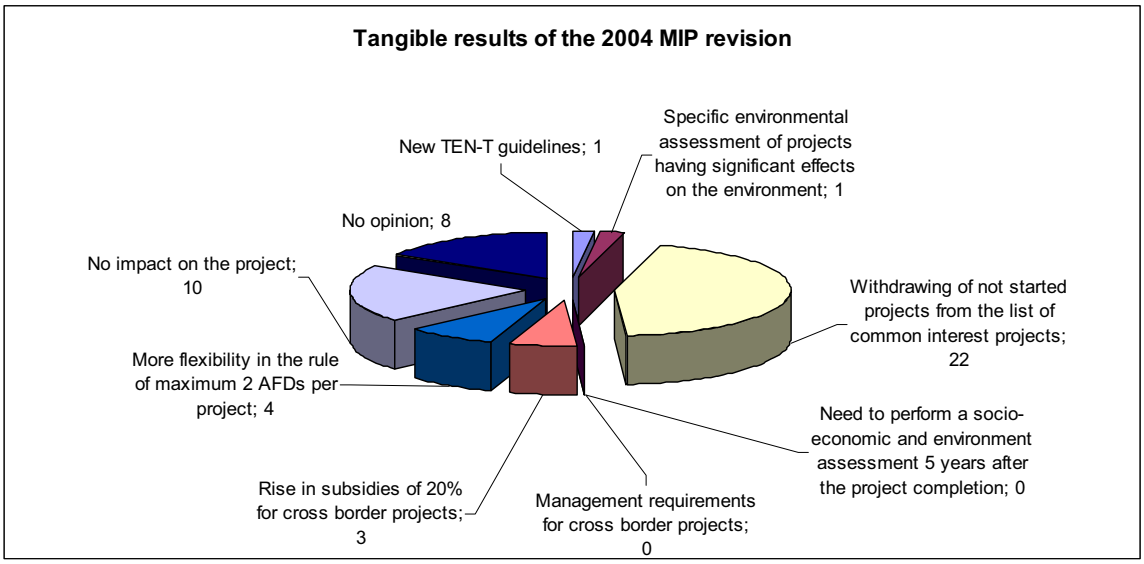
57 Decisions C(2004)3242 amending the Framework Decision establishing the Indicative Multiannual Programme for the granting of Community financial aid to projects of common interest in the area of the trans-European transport network for the period 2001 – 2006 C(2001) 2654/ final.

58 Framework Decision establishing the Indicative Multiannual Programme for the granting of Community financial aid to projects of common interest in the area of the trans-European transport network for the period 2001 – 2006 C(2001) 2654/ final.

59 Decision No 884/2004/EC of the European Parliament and the Council of 29 April 2004 amending Decision No 1692/96/EC on Community guidelines for the development of the trans-European transport network.

60 The Figure presents the opinion of the beneficiaries by project.

Figure 18: Tangible results of the 2004 MIP revision



It should be noted that that many interviewees were not aware of a number of the other changes. The revision of the list of projects was very important to many because they received more money as a result. From the point of view of the Commission, this also allowed it to focus its attention on fewer projects. This appears to have increased effectiveness and efficiency.

Few beneficiaries deemed that the rise in subsidies up to 20% had had a significant impact on their project. There is one clear reason for this: many of the cross-border projects are still at the study stage (and are therefore eligible for 50% funding). One project which hoped to benefit could not because of what could be regarded as an anomaly in the rules: the PBKAL project is based on a political agreement by the relevant governments nearly two decades ago and is not underpinned by an international agreement or management company, but has proceeded on the basis of political will. This makes PBKAL projects, even those in border areas, ineligible for this higher level of funding.

It should be noted that very few realised that they have to realise a socio-economic and environmental assessment five years after project completion. They also raised questions about this, since the greatest impact is likely to come from the complete TEN-T project rather than individual MIP projects.

In addition, some respondents admitted that had they known that a revision was imminent in 2004, they would have managed their project differently. They could, for instance, have increased their absorption rate in the early years of the MIP, since the redistribution at the time of the revision was performance-related.

Overall, we can state that the changes in the MIP management decided by the Commission were not effectively communicated to the various beneficiaries. They often had to work out for themselves where there were changes and what the implications were in the AFD or in the various monitoring tools and deemed that the support from the EC was not enough. However, not all the responsibility for this can be laid at the EC's door as we encountered instances during the interview process where there had been breakdowns in communication between the government and the project promoters.

5.3.4. PERFORMANCE COMPARISON BETWEEN MIP AND TEN-T ANNUAL CALLS

As the financial information relative to the TEN-T annual calls procedure was not available to us in a comprehensive way, we faced some difficulties in the analysis of the performance comparison between the MIP and annual calls. We did, however, have a look at both instruments from a process perspective, trying to identify specifically the advantage and disadvantages of each.

The main differences between MIP and non-MIP projects are:

- non MIP-projects are generally more closely defined and delimited in terms of time and cost than MIP projects[61];
- the timeframe of the non-MIP decision is more flexible. There is no fixed eligible period for non-MIP decisions. In the MIP, activities are covered by an annual decision (AFD) and have to be realised according to the rule year + 1 or year + 2 if justified by the beneficiaries.

In terms of selection of the projects, the main benefit of the MIP process is that it makes it possible to avoid the annual submission of a detailed application form and the discussion on project selection at the meeting of the TEN-T FAC.

With the MIP, one applicant form has to be submitted when support is sought for the first time. On this basis, projects are selected and approved by the TEN-T FAC. In the following years, only PSRs are used to assess the progress of the projects and serve as a proxy for an application for the continuation of the Community aid. Nevertheless, new Annual Financial Decisions have to be adopted following the usual process (ISC)[62] and the right of review of the European Parliament.

Under non-MIP, project promoters have to submit an application form each year they apply for Community aid and the selected projects have to be approved by the TEN-T FAC.

The MIP therefore has a faster and simpler procedure for both the Commission and Member States overall. Nevertheless, it also generates an indirect administrative burden:

- given the fact that the activities supported are identified and planned six years in advance, the risk of change is high. As a consequence, the Commission needed to amend some AFD's in the light of changes to the project over the period;
- for the same reason, the description of the activities is overall less clear and focused than in the annual-calls process. This generates extra work during the follow-up and verification of the payment requests. It difficult to clearly make the link between invoices and receipts, and a list of activities described in general terms;
- the fact that under the MIP, activities are divided into different years and that invoices must be submitted for activities on the basis of the year in which the activity has been carried out, when in practice contractors often do not submit invoices until completion of the project in a subsequent accounting year, and given than MIP projects are specifically described than non-MIP projects, can creates a major workload in the Member States when making the

61 The project can be supported over several years, but new applications are needed each time.

62 Interservice Consultation.

payment request (sometimes two years after the activities were carried out) in order to identify items in closed accounting years. In many cases, this requires manual intervention which is time-consuming and increases the risk of error.

- given the fact that MIP AFD's are open for two years on average and that two AFD's (more than two as from 2004) can be open simultaneously, the number of open decisions to be handled at the Commission increased steadily during the MIP programming period.

In conclusion, the MIP process generates time savings but also an indirect administrative burden for the Commission and Member States which to some extent cancels this out. It was clear from our interviews that the MIP process was seen as more burdensome than the non-MIP process.

The most recognised advantage of the MIP is the legal certainty of receiving Community aid on an annual basis during six years. Beneficiaries admit that this certainty effectively increases the foreseeability of the projects even if the foreseeability is not total, since, among other things, [63] the full amount is not guaranteed if a project performs below expectations. This foreseeability is consequently particularly welcome for large projects that are likely to generate regular costs over the six-year period.

Nevertheless, this foreseeability has an impact on the flexibility of the MIP compared to the TEN-T annual calls as a result of the fixed eligibility period, and the difficulty of changing the activities to be supported if the scope of the project changes.

In conclusion, we can say that MIP and TEN-T annual calls are complementary instruments and are suited to different types of project:

- projects that better fit the MIP are mature projects with a timeframe of several years;
- TEN-T annual calls are more adapted to short-term exploratory projects.

5.3.5. OVERALL CONCLUSIONS

In the light of this detailed assessment, it is possible to draw conclusions on a number of issues relating to MIP management.

First of all, we can state that MIP management proved to be much more complex than initially foreseen. The purpose of a multi-year programme was to simplify a selection process which had previously been conducted annually, and to provide the same projects of common interest stability in their funding framework for the whole MIP period. In practice, this did not prevent the selection of projects which did not go ahead (43% of the MIP projects absorbed in average 53% of the their awarded amount and 15% of the selected projects did not start) and the number of AFDs open at any one time increased over the period, and the sheer number made management difficult.

In our opinion, projects of common interest that were likely to face delays for technical or political reasons did not fit well with the MIP process, while the MIP was created in order to accelerate realisation of the TEN-T projects. What did fit the MIP process were mature projects of high national interest as they were able to provide expenditures for payment on a regular basis without gaps in their planning processes.

63 We analyse the effectiveness of the MIP in terms of foreseeability within Theme C of the present report.

In 2000, during the selection process, the Commission negotiated with the Member States in order to select the projects that would receive MIP grants over the six-year period. This preselection was then enshrined via the preliminary application process, on the basis of a form that summed up the main features and indicators of projects. On this basis the Commission officially made the final selection

We conclude that this process lacked transparency because the selection criteria and the indicators that would be used were not clearly illustrated in the application form. This led to problems for the Commission in providing effective follow up of the projects and in identifying whether they achieved their objectives. The budget absorption rate was the main criterion used in the Project Status Report in order to evaluate the progress of the project and not its actual progress.

As the MIP was a new tool, there were many changes in the rules and procedures of the MIP during the programming period, as the Commission sought to adapt the system to match on the one hand the Commission's needs in terms of reporting and overall efficiency and effectiveness of the MIP as the main financial TEN-T tool, and on the other hand, the beneficiaries' needs in terms of flexibility and foreseeability of MIP financing. As a consequence, the overall management lacked stability, and the way in which the process of change was managed, resulted in wasted time for both the Commission and the beneficiaries. A key problem was the fact that beneficiaries were not always provided with clear information about these changes. The communication from the Commission to the project managers via national governments could have been more effective.

As a European tool, the MIP could have had an added value in terms of transfer of management good practice to the beneficiaries. During our interviews within the Member States, some beneficiaries from small countries admitted that the MIP procedures were useful in improving their national management procedures. On the other hand, beneficiaries from large countries deemed that their national rules were the best and that the MIP did not positively impact them at all. Moreover, the fact that changes in the procedures that were not adequately communicated impacted negatively on the beneficiaries' perception of the MIP management mechanisms. Nevertheless, on the whole, they felt positive about their relationship with the Commission and its staff.

6. CONCLUSIONS

This evaluation was designed to evaluate the Multiannual Indicative Programme (MIP) set up in the overall policy framework of the TEN-T, not the individual projects co-financed under the TEN-T framework. However, an understanding of the individual projects was vital to be able to form a view at aggregate level. Consequently, we devoted considerable time to interviewing stakeholders in the Member States, both government officials and project promoters, as well as stakeholders at EU level, notably European Commission officials, to understanding the projects and the context in which the MIP operated.

One of the key issues was to understand how the MIP was perceived relative to non-MIP funding. It was quite clear from our interview process that the foreseeability of the MIP was valued by the beneficiaries in the absolute. There were some aspects of the process which detracted from this foreseeability, but the principles of legal certainty and foreseeability were regarded overall as beneficial and contributing to the effectiveness of their investments. The fact that the FAC was involved only once, i.e. in relation to the initial Framework Decision, but not at the time of each subsequent Annual Financial Decision, was also positive.

A downside relating to foreseeability was the tendency only to put up mature projects for funding in order to be sure not to lose the MIP funding as a result of delays. While maturity was one of the selection criteria, this raises the issue of whether these projects would not have gone ahead anyway. It is clearly not possible to establish this definitively and not in the beneficiaries' interest to admit that this would have happened. However, many did go as far as to concede that the projects would have gone ahead, albeit rather more slowly and possibly without the latest technology in terms of traffic management and signalling, for example. The selection procedure also failed to some extent in picking the truly mature projects, as 15% dropped out at the 2004 revision and 43% did not absorbed the support foreseen in the framework decision.

Since the sums of money required for the TEN-T projects in their entirety are very large, the mature projects tended (albeit called projects in this context) to be segments of the overall Priority Projects, and to be those where there was a high national commitment, or where the national commitment and EU interest coincided - at the expense of those where the EU interest was paramount. This was particularly true of investment projects. The MIP did clearly play a significant role in funding studies, particularly for cross-border studies and risk mitigation.

The MIP was also an important catalyst in releasing national public funds. It is likely, though difficult to substantiate, that annual funding would not have achieved the same result. The MIP funding was also felt by a number of beneficiaries to have heightened the visibility of the EU vis-à-vis public opinion, and the fact of EU support was felt to have had a positive influence on local authorities in obtaining permits because they perceived it as prestigious to have a project receiving EU funding. Beneficiaries in a number of countries said that the fact that they were eligible for MIP funding meant that they had escaped budget cuts when other infrastructure projects were hit, either because of the risk of losing the MIP funding and/or because it was felt to be important for the country's image within the EU not to delay a MIP-funded (and by association a TEN-T) project.

It tends to be a characteristic of large infrastructure projects that they are susceptible to technical, environmental and political delays, and that planning over a six-year horizon cannot hold good for the whole period without revision. The projects funded by the MIP were no exception, and in that respect the 2004 revision proved a good opportunity to redistribute funds to take delays in deployment or project changes into account. On the other hand, the procedures for obtaining an amendment to an Annual Financial Decision in the course of the year if there were unforeseen problems (or unexpected progress was made) were felt to be overly complex.

The possibility of having more than two annual financial decisions open at one time was also felt to be positive as a result of the 2004 Guideline revisions. However, it was clear in a number of countries that beneficiaries (and their governments) had not realised the existence of or the implications of some of the new rules. There appears in some instances to have been a breakdown in communication between the Commission and Member States in raising awareness of these changes.

The benefits of foreseeability were to some extent undermined by the fact that there was never 100% certainty that the full amount sought would be awarded in the annual financial decision, or about the time that would be taken to approve the annual financial decision and the timing of payments. This did not lead beneficiaries to hold up MIP projects, but meant that they had to provide working capital in the interim, creating uncertainty for other projects in their investment pipeline.

While no beneficiaries would have wanted to be without the MIP funding, many felt that the 'cost' in terms of procedure - and despite the benefits of foreseeability - was excessively high relative to the amounts of money involved. There are examples of beneficiaries who had aligned their own management systems on the Commission's, or who felt that their own monitoring procedures or evaluation culture had benefited from the example set by the MIP and Commission processes, but on the whole the amount of red tape involved was felt to be excessive and, in some ways, counter-productive, as it meant European Commission staff were too busy with checks and controls "to see the wood for the trees", i.e. to have a broad understanding of the projects and the specific problems of infrastructure projects, and to develop specialist expertise, or collate and disseminate information on best practice, e.g. on public-private partnerships.

It was not only the amount of form-filling which irked beneficiaries, but the number of changes and the increase in the amount of documentation required over the life of the MIP. To beneficiaries, some of the changes appeared to be of form rather than substance to no good purpose. It was often felt that changes were inadequately communicated, that there was a lack of clarity in definitions and terminology, that there were no standardised indicators for measuring results, and that there was too widespread an assumption that English is an acceptable *lingua franca*. (Documents such as the *vademecum* were also published in French and German, but very late in relation to the time at which they were needed.)

The preliminary application form as it existed for the 2001-2006 MIP does not appear to have been optimally fit for purpose, in terms of enabling Commission officials to make a sound appraisal of a project in a pre-selection phase, but we accept the view of those who felt that the concept of an initial stage requiring less-than-full documentation was sound if the form had been properly designed. This same form could also then be used if an amending decision to the annual financing decision were needed in the course of the year because of significant changes to the project scope or cost. During the 2001-2006 MIP a full application form had to be filled out for this.

The increasing amount of information required in the PSR was also felt to be unnecessary, while we at the same time formed the view that the PSR as currently structured was not suited to providing an overview of the project that would allow desk officers adequately to make the necessary compliance checks. So less volume and a more adapted form would be welcome.

The fact that the Structural Funds and the MIP have different financial regulations, and different rules, in particular, on the link between commitments, invoices and payments by the Commission was deplored in a number of instances.

Evaluating the impact of the programme as a whole even over a period of six years, has considerable limitations. Of the 50 projects we studied, only 12 are operational, and in many cases, the 'project' as funded by the MIP is only a segment of a TEN-T project, i.e. a stretch of railway line or road, and/or full operation at maximum speed for a high-speed train is dependent on upgrades

still to come of signalling, or the availability of the rolling stock. Large infrastructure projects generally take fifteen years to come to fruition.

During the MIP programming period 2000-2006, political agreements were reached between several countries. Many cross-border links are now in the project phase or even in the implementation phase. We envisage that major cross border links will produce major impacts on the European network in the horizon of 2010-2015

However, we have every reason to suppose on the basis of our analysis that the impact of the MIP was commensurate with what could reasonably have been expected over the period, particularly as the 2004 Guideline revision provided flexibility to deal with the unavoidable unforeseen events for this type of project.

The MIP also supported the objectives of the TEN-T guidelines, particularly close of removing bottlenecks and filling missing links. The MIP served only, in very isolated instances, on the other hand, as a stimulus to consideration of PPP financing.

On the one hand, rail projects tend to be inherently less attractive for PPP projects because of the long time frames and the frequency with which such projects overrun their timetables and costs. On the other hand, the availability of the MIP had a crowding-out effect; as it reduced the incentive to look for alternative means of financing. It should also be noted that many national governments do not yet believe in the benefits of PPP financing, so that it would be difficult for the MIP as such to change this in the context of a limited number of projects since an overarching political decision of principle (followed by adoption of a suitable overall regulatory framework) is generally a prerequisite.

The fact that the MIP supported TEN-T rail projects in broadly the same proportion as their importance to the TEN-T reinforced the importance attached within TEN-T to environmentally friendly transport modes.

The existence of the MIP also gave the Commission leverage to ensure that the most advanced systems of traffic management were used and that interoperability was promoted. The MIP also fulfilled its objectives of supporting projects characterised by their particularly high cost, large scale and - to a lesser extent - their cross-border nature. Cross-border projects often involve more complex geography and geology, as well as the need for intergovernmental agreements, so that the fact that several of these are taking longer to get off the ground cannot be explained by the availability or otherwise of MIP funding. At the same, our financial analysis showed that the large-scale projects tended to have a higher propensity to absorb MIP money, suggesting that the MIP was particularly suited for this purpose.

7. RECOMMENDATIONS

This evaluation work was focused on the programming period 2001-2006. The recommendations are therefore formulated regarding former MIP procedures. Consequently, new Multiannual Programme (MAP) for 2007-2013 already takes into account some of the following recommendations.

1. We recommend that the selection of projects for MIP funding be based on a clear hierarchy of selection criteria[64] rather than a range of criteria which are implicitly considered to be of equal merit.

3. In order to reduce the extent to which the MIP funds mature projects with which Member State governments would have proceeded irrespective of the availability of MIP funding, and

   in order to encourage the funding of cross-border projects,

   we recommend that:

   - the primary objective be to fund projects of high European interest which will fill missing links or eliminate bottlenecks;
   - in the light of the above, the TEN-T coordinators be asked to define which are the projects of high European interest and low national commitment[65];
   - the rate at which studies for projects of high European interest and low national commitment is funded be increased[66];
   - the rates at which investment projects are funded be modified, with projects of high European interest and low national commitment being eligible for grants of 30%[67] and other projects be restricted to grants of 5% of total eligible cost. We believe that the lower rate will still be enough to give the Commission leverage in encouraging projects which are both of high national commitment and high European interest, and encouraging investment in modern traffic management systems.

5. We recommend that TEN-T coordinators be required in their analysis of the progress of projects to report on the extent to which progress will in part or totally be negated by the absence of or delays in crucial flanking activity, such as interoperable signalling or the necessary rolling stock in order to facilitate the task for the European Commission when arbitrating between project applications which otherwise have equal merit.

---

64 We refer here to the selection criteria listed in Article 5 of the Regulation of the European Parliament and of the Council laying down general rules for the granting of Community financial aid in the field of the trans-European transport and energy networks.

65 Strategic Evaluation on Transport Investment Priorities under Structural and Cohesion Funds for the programming - Period 2007-2013, DG REGIO provides a number of guiding principles that could also be used to identify these projects.

66 Presently 50% according to Art. 6 2. of the Regulation

67 According to Art. 6 2. of the Regulation

6. We recommend that:

    - projects at the EU's external borders be eligible for MIP funding on the EU side of the border, where a cross-border agreement is in place on proceeding in tandem with studies and investment on both sides of the border.

    - studies be eligible for funding only from the detailed design of the implementation stage onwards since studies for early-stage projects are not suitable for inclusion in a multi-annual programme.

7. We recommend that encouragement of public-private partnerships (PPP) continue to be an objective, and that:

    - the European Commission collect and disseminate in a structured manner information on best practice in transport PPP[68] but also information on other tools and products in order to facilitate access to private financing sources such as the EIB loan guarantee and risk capital facility

    - the financing rate be increased for any project financed by a PPP.

8. We recommend that a revision of the MAP framework Decision in order to redistribute funds likely to be under-utilised should be automatic after four years, and that any subsequent revision towards the end of the funding period be announced six months in advance[69].

9. We recommend that the Commission further refine its work on the definition of concepts, both generic, (such as 'project' and 'project part') and technical, drawing up a glossary of terminology in all EU languages, which should be used at all times for all documents, including those core documents produced only in English, French and German.

10. We recommend that activities be described in all documents, including applications from the Member States, on the basis of a standard nomenclature, such as the International Standard Industrial Classification (ISIC) codes, developed further as required (e.g. for studies).

11. We recommend that the Commission consider and discuss with Member States whether a system whereby Member States could choose between annual and biannual instalments would be desirable and feasible in order to provide greater flexibility and be better adapted to the range of planning processes which exists across the EU.

12. We recommend that the initial Framework Decision be flanked by an individual Financial Decision in order to make a clear distinction between documents containing a general description of activities and those containing specific descriptions which are used to trigger payments. We believe that the extra work involved initially will be more than outweighed by the benefits of greater clarity.

13. We recommend that the application form be redesigned in order to require the inclusion from the outset of information, based where possible on indicators, on the need for the project and for the project finance, the objectives and the anticipated impact in socio-economic terms, in order to form the basis of ex post evaluation of the outcomes. This redesign should be based

---

68 In this dissemination work, Commission could take advantage of the know-how of the European PPP Centre.

69 New Regulation already foresees a revision at mid-term in its Article 8.

on existing initiatives such as the HEATCO report[70] and/or the indicative guideline on evaluation methods published by DG REGIO for programming period 2007-2013[71]. This redesign should be carried out in such a way that the time taken to fill it out is no greater than in the past.

14. We recommend that the same principles as we recommend for the application form also be applied to the project appraisal form.

15. We recommend that the European Commission work with Member States on a core set of standardised definitions for indicators, including net present value, cost-benefit analysis and internal rate of return. We suggest to apply the methodologies presented in the HEATCO report or other initiatives such as Railpag[72] and the Guidance on the methodology for carrying out cost-benefit analysis of DG REGIO for programming period 2007-2013. We recognise the difficulty of such an exercise and recommend, therefore, than in the meantime, Member States be required as a minimum to provide information about the basis of any figures they provide on which expectations of financial or economic viability are based, and to provide a detailed justification if they are not able to provide at least one of these figures.

16. We recommend that the Project Status Report be redesigned to include information on other sources of funding at project level (and not only at project part level) in order to enable the Commission to have a better overview of the project context.

17. We recommend that the European Commission develop web-based forms for use by the Member States, notably in relation to the Project Status Report, and for use by its own staff, e.g. for mission reports, which can then be uploaded automatically into the Commission's Project Management System (PMS).

18. We recommend that the PMS be upgraded to make it possible to upload web-based forms and other documents without manual intervention and so that information from the financial decisions can be aggregated by project.

19. We recommend that all changes in forms and procedures, and changes in Guidelines, be clearly communicated to Member States and project promoters, i.e. there should be separate communications spelling out the changes individually.

20. In the belief that the changes recommended above will save time for desk officers, who are obliged to be control-oriented under the current system, we recommend that the Commission not reallocate that time to other areas, but consider it a priority that desk officers from the TEN-T Agency devote that time (via desk research and site visits), to deepening their understanding of individual projects and the broader picture into which those projects fit, in the interests of improving project selection and dialogue with Member States and project promoters.

---

70 HEATCO, DG TREN *Initiatives in order to develop Harmonised European Approaches for Transport Costing and Project Assessment.*

71 We refer here more particularly to Working Document No. 2 *Monitoring and Evaluation indicators*

72 Joint EC-EIB initiative in order to harmonised procedures for rail project appraisal and suggests best practices for applying cost-benefit analysis to rail projects

21. We recommend that, whatever system is put in place for the funding period beginning in 2014, the definition of strategic orientation and planning be launched in 2012 in order to avoid the one-year funding gap that occurred in 2000 and 2007.

8. ANNEXES

European Commission

DG TREN Contract
TREN/06/ADM/S07.67266 2006

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

Annexes – November 2007

TABLE OF CONTENTS

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 Tanttu	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 Ensch	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 (Intervençao operacional de acessibilidades e transportes)	Manager	05/06/2007
	Germano Farias Martins	IOT (Intervençao 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 Laïos	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	Fermern Baelt A/S	Manager	8/05/2007
GR3009	Gregers Jensen	Fermern 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 Komsi	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 Economic and Social Infrastructure Operational Programme Unit, Road Policy	4/05/2007
PP1301	John Brown	Department of Transport	Principle officer Economic 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 Staff Member	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 Staff Member	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.	Treaser 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 Sarmento 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 Infrastructuras 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.*

Project Management

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	:
Copy row for each project	

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.*

Project Management

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.

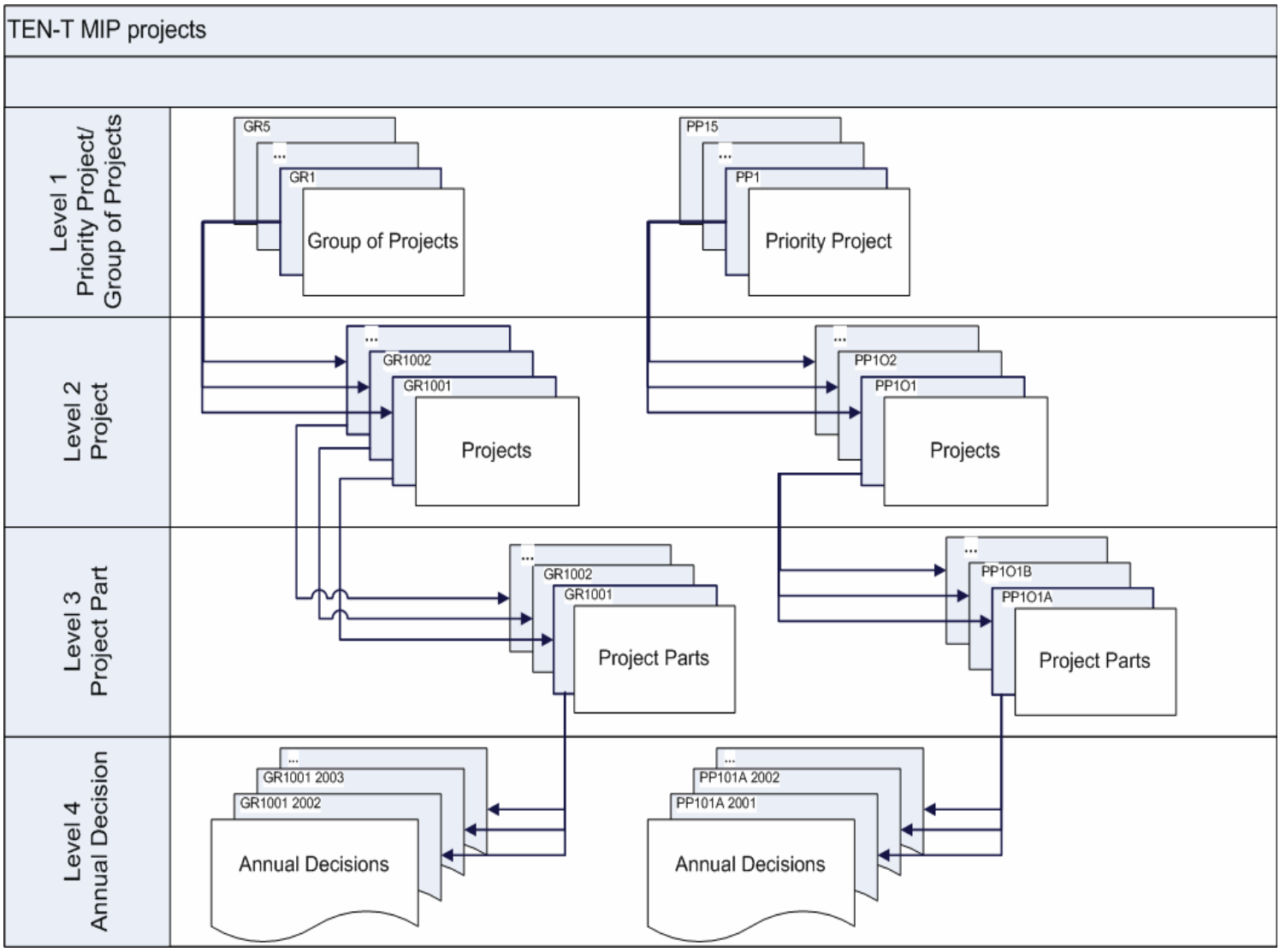
3.2.1. OVERALL STRUCTURE AND RELATIONSHIPS

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

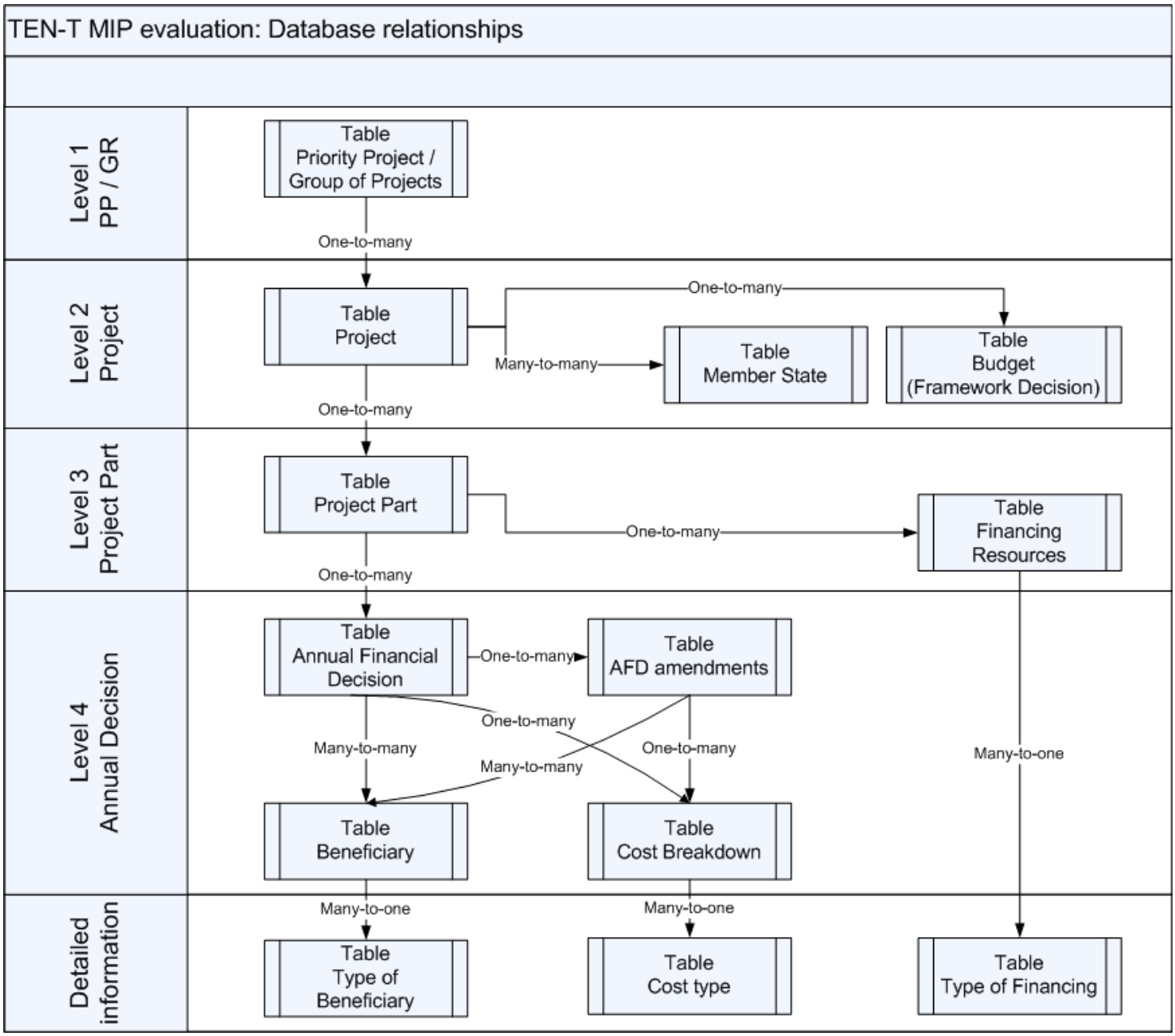


All Priority Projects (Essen Projects), within scope, are defined on the same level as a Group of Projects (level 1 in the graph). The next level is more detailed and points out each project individually (as they are defined in the framework decision). Level 3 contains all project parts (also defined 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 loosing 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

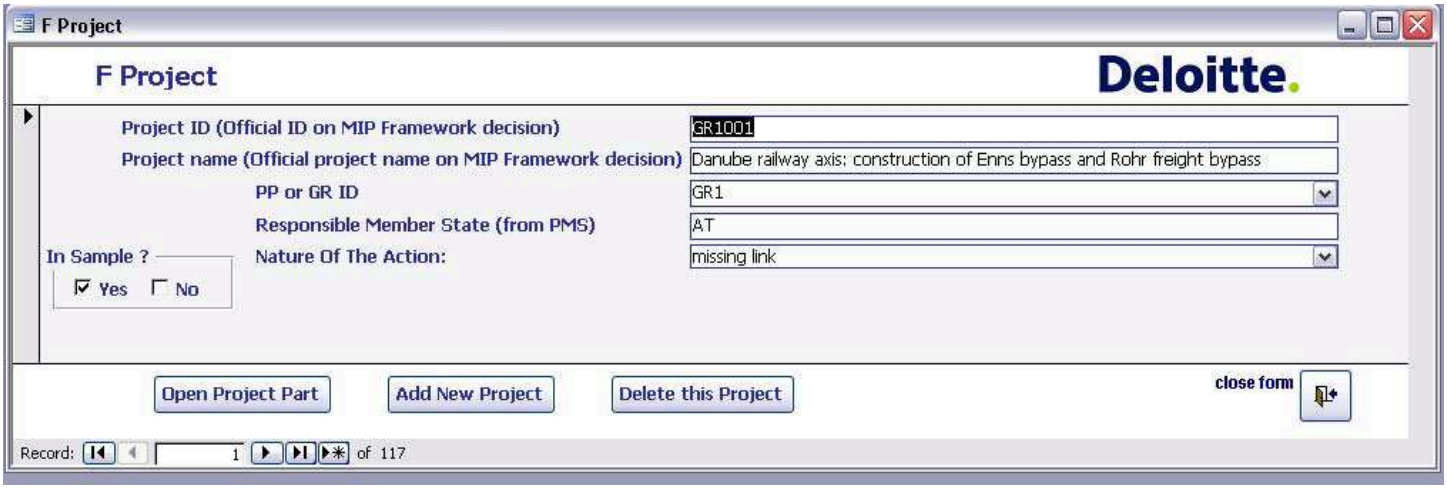
The field PP or GR ID stands for the official ID given by the European Commission. In the "Priority Project/ Group of Projects" table this field is used as primary key because it should be unique, only 1 record per project should be allowed in the database.
Furthermore, the transport modality is defined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

T Budget (framework decision and revisions) : Table (Replicated)

Field Name	Data Type	Description
Budget ID AutoNumber	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)

Field Properties

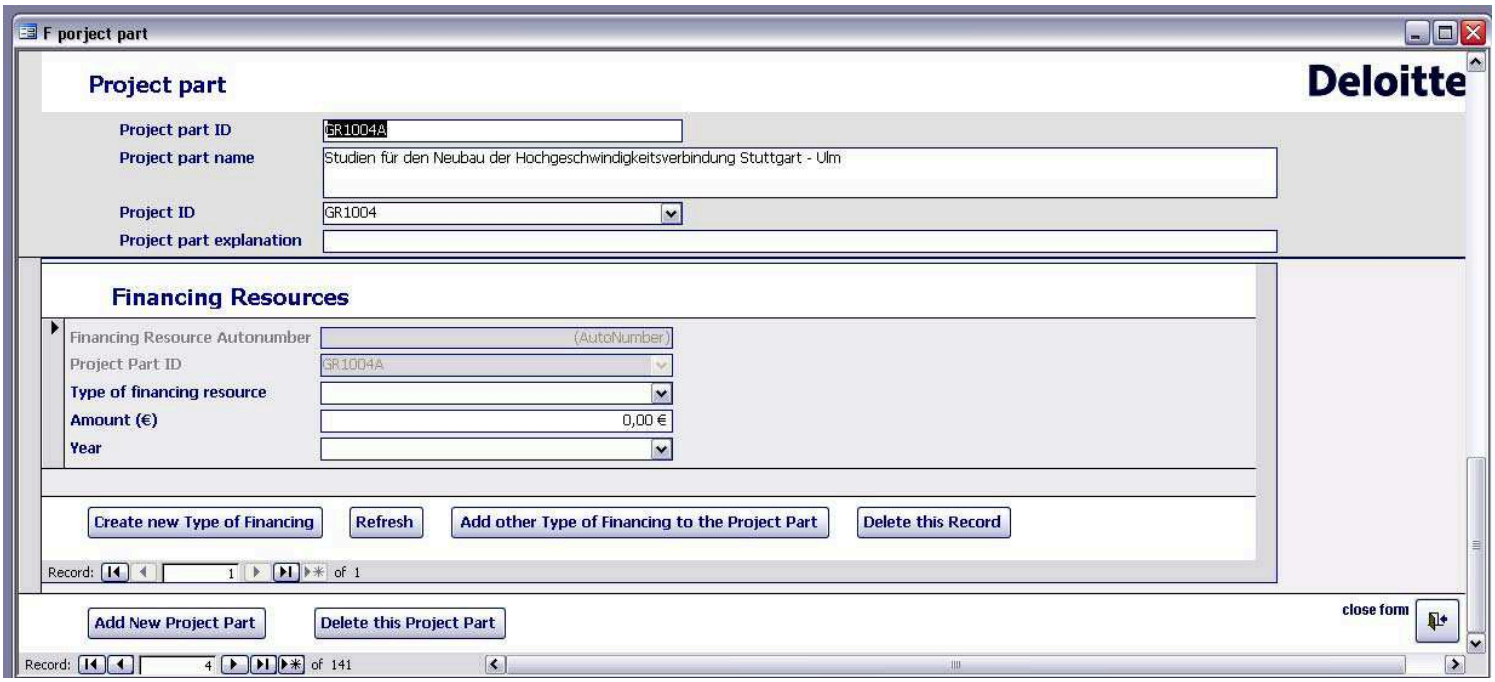
As this information has been entered all at once in database based upon the framework decision, there has not been made a form for this. Modifications to this kind of data are being made with a new, revised framework decision, so there is no need to adapt the current data in the database via a form. (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

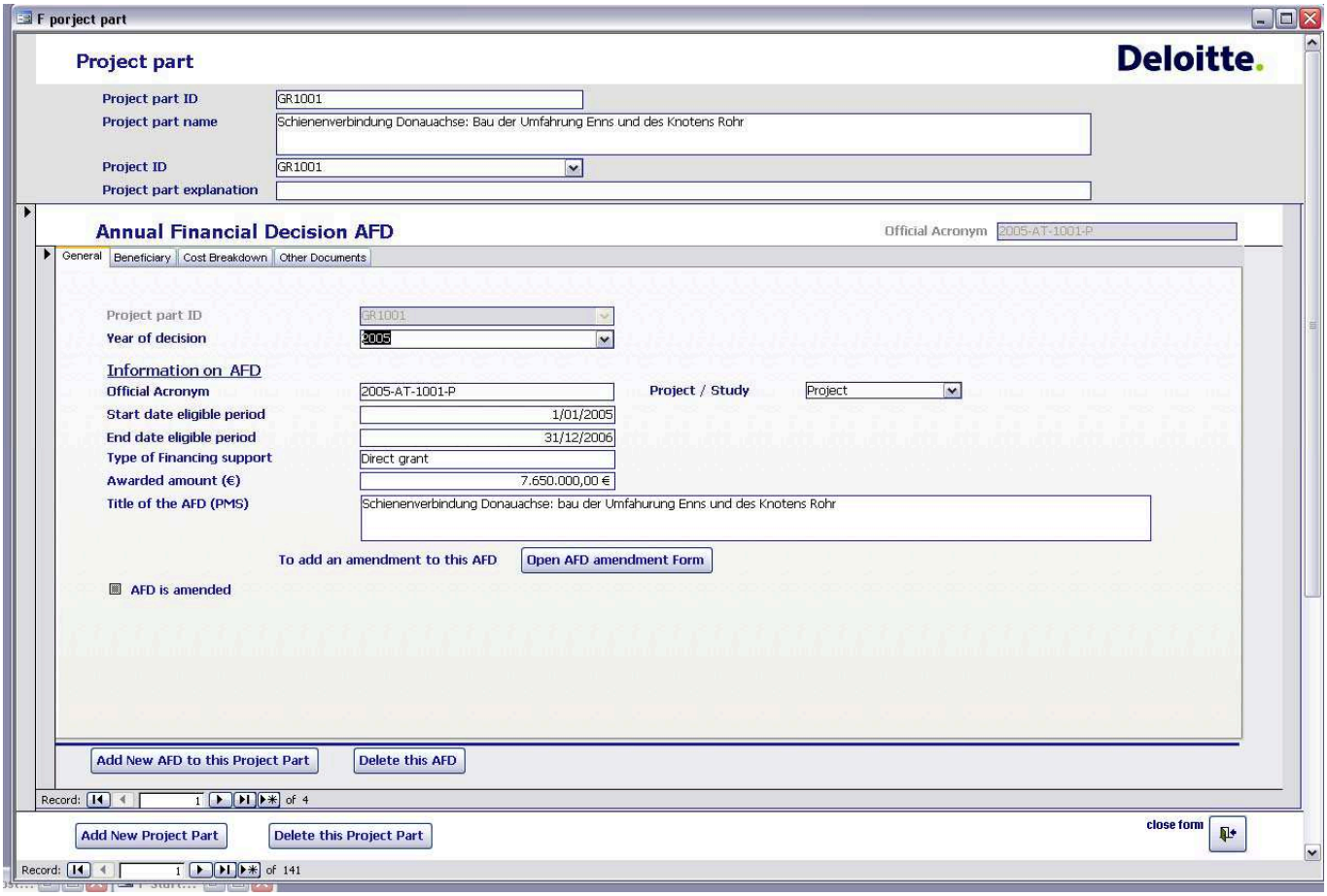
One record of this table stands for one Annual Financial Decision (level 4)
Within the *project part* form, there is a sub form embedded to enter information on an AFD level (which you can see in the print screen below). In the first 3 tabs, information is captured that can be found on the actual paper 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 if 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 from).
In this part of the form, the possibility to ad 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.)

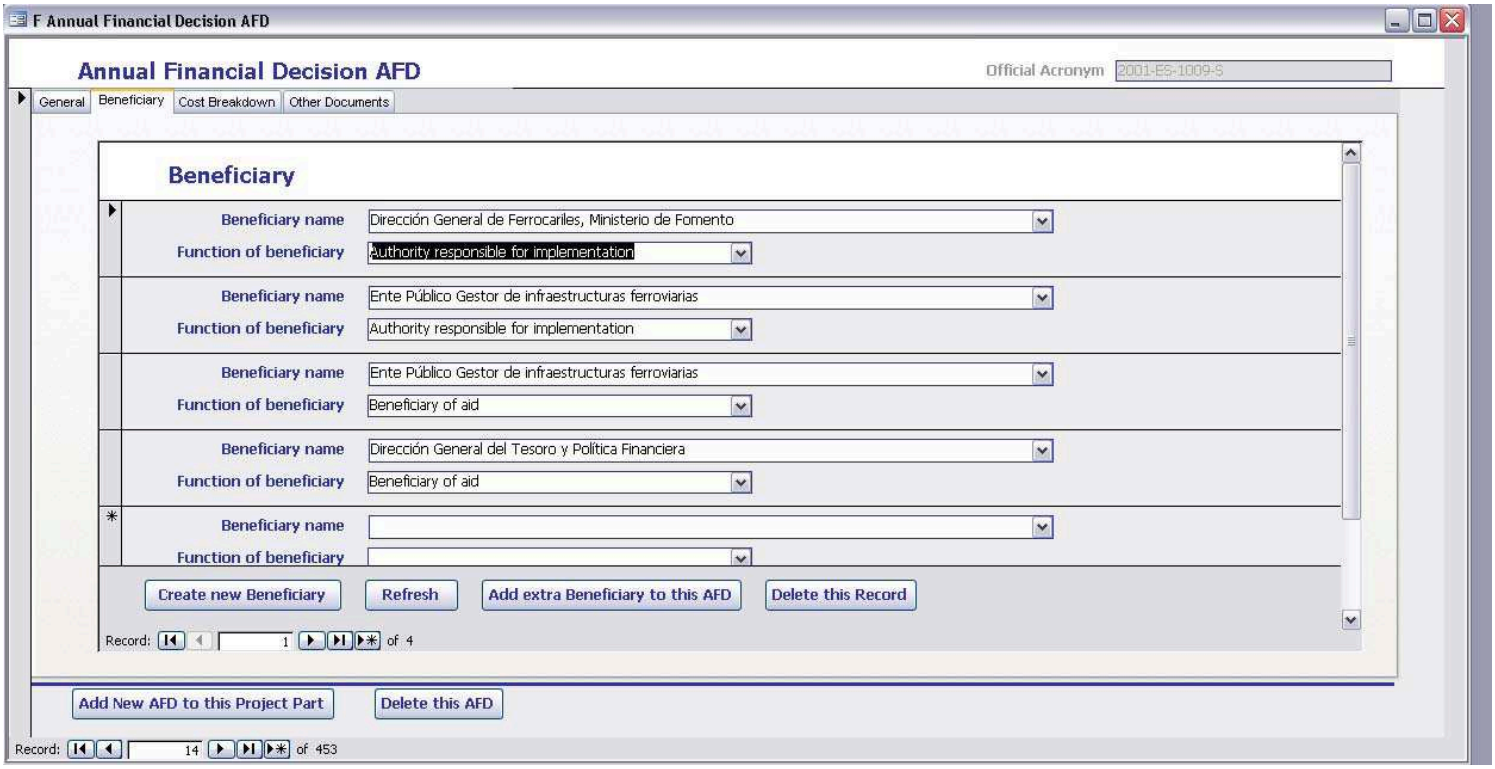
Table 24 – Database: AFD form



- 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

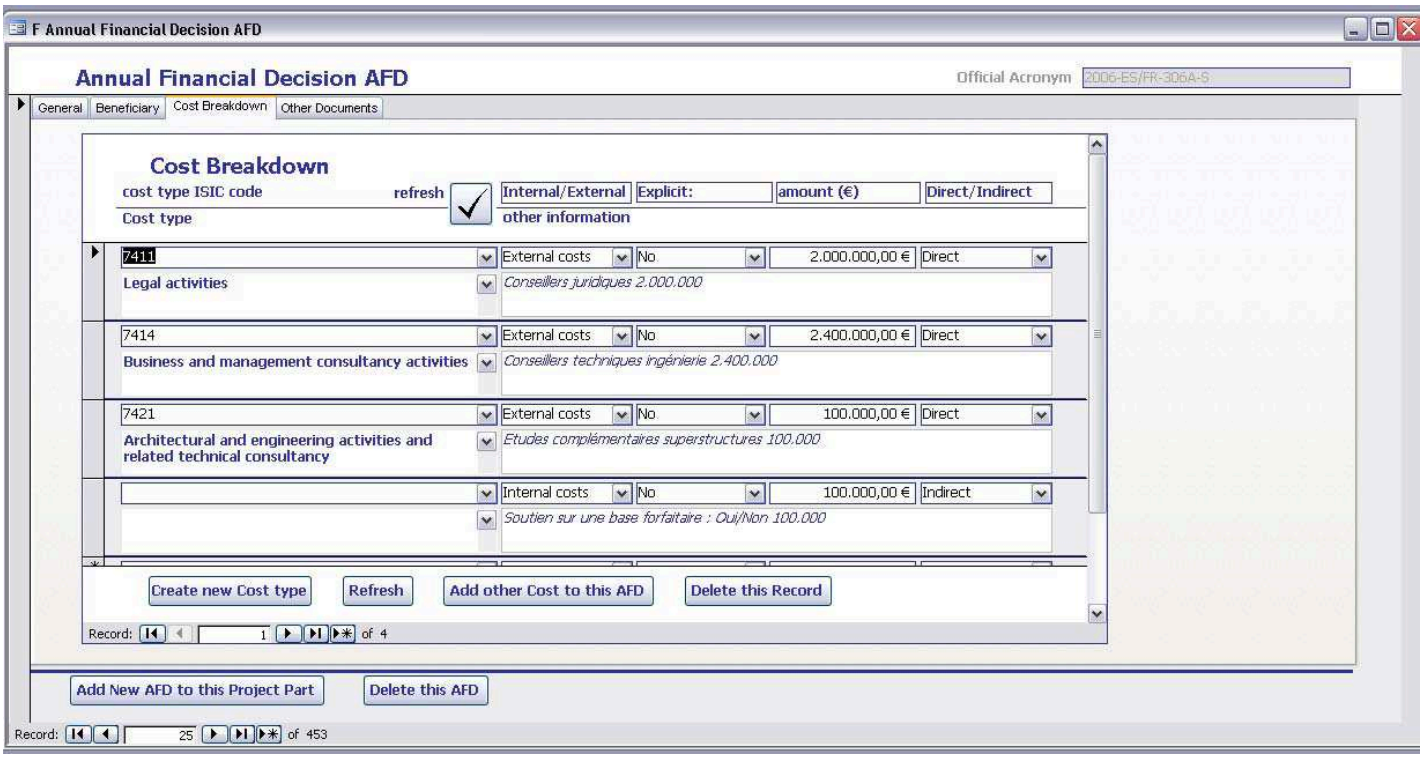
- Cost Breakdown

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.

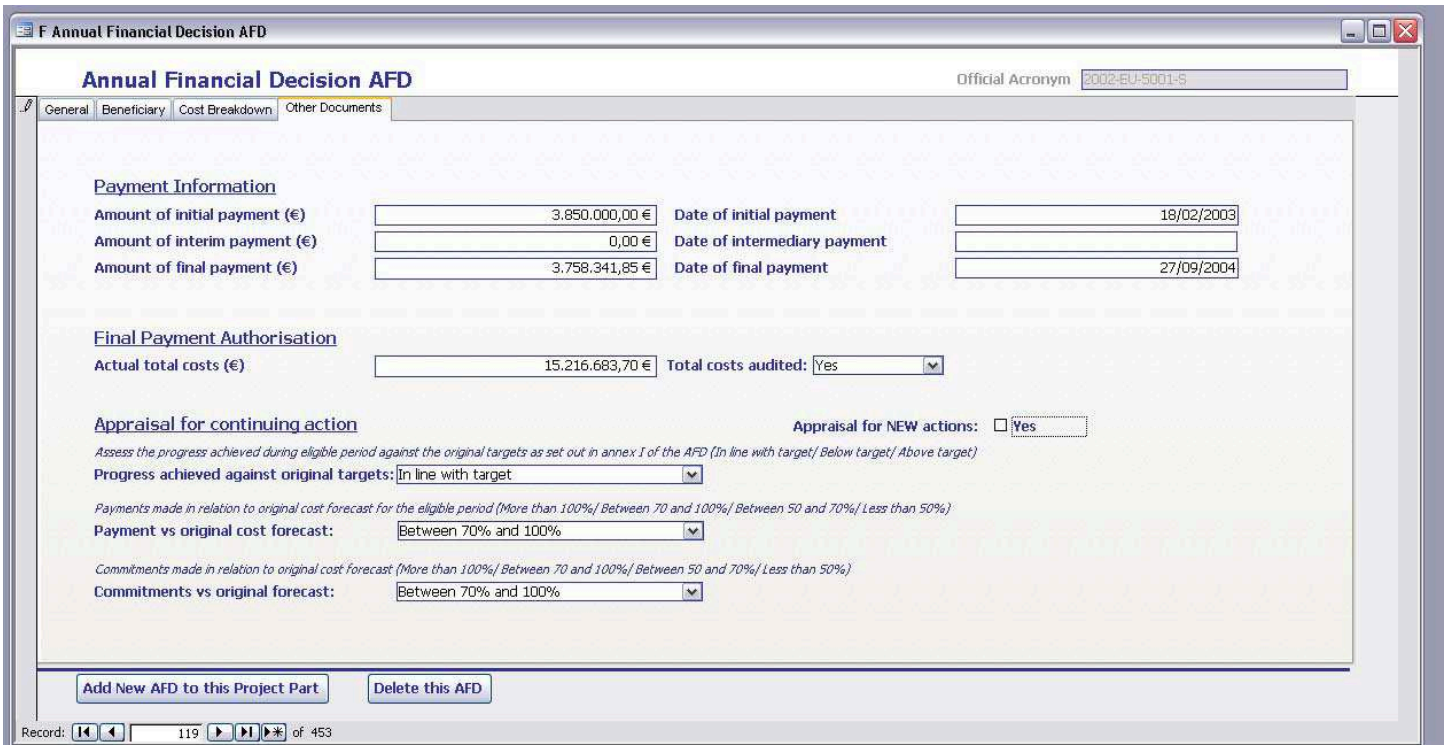
Table 26 – Database: Cost Breakdown subform



- 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



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 from, 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	Invstigation of socio-economic and regional consequences of a fixed lin across the fhemarn 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	Schienenverkehrsstrategie "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 AmsterdamÄBrusselÄParijs/Londen Nieuwe HSL-Nota Tracénota NoordHSL-tracés RotterdamÄAmsterdam (1994)
46	NL	PP201	Nieuwe HSL-Nota Tracénota Zuid: HSL-tracés Rotterdam Ä 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, recommendations 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 recommendations
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 econimica 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 éconmique de l'autoroute ferroviaire (mai 2007)
88	SV	PP1202	Citybanan i Stockholm July 2002
89	DE	All	Bundesverkehrwegeplan 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, Bundesverkehrwegeplan, 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 deutsche-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*).

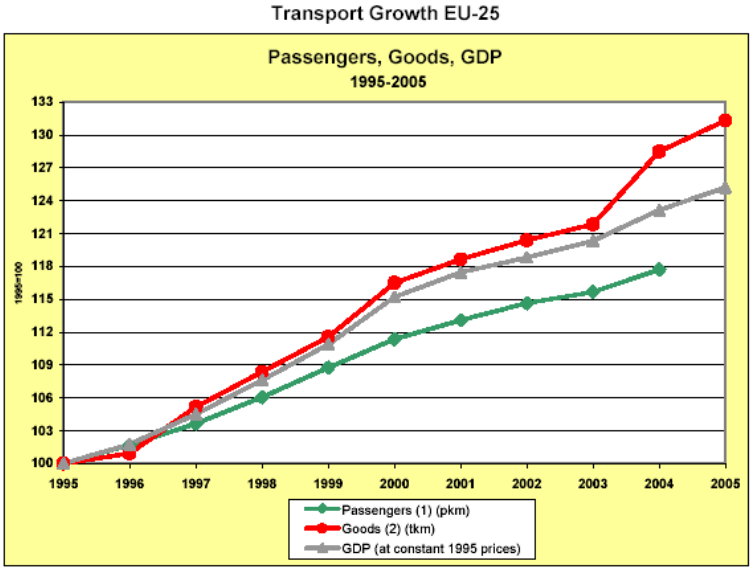
Railway length in the EU-25 declined between 1995 and 2004 by close to 6% (*see Table 5*). This decline in railway line length in the EU-25 was the net result mainly of decreases in the three largest networks in Germany (-15%), Poland (-15%), and France (-8%) (*see Table 6*). However, aided in recent 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 airports[1] 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



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	1 696	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	23 986	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	10 964	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	17 176	17 179	17 064	17 044	17 052	17 052	17 052	16 514	**UK**
BG	4 196	4 341	4 299	4 294	4 293	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		673	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
Bruxelles/National	1
Bulgaria (3)	**Rank**
Sofia	1
Burgas	ó
Varna	3
Czech Republic (2)	**Rank**
Praha/Ruzyne	1
Denmark (6)	**Rank**
Kobenhavn/Kastrup	1
Germany (25)	**Rank**
Frankfurt-Main	1
Munchen	ó
Düsseldorf	3
Berlin/Tegel	4
Hamburg	5
Stuttgart	6
Köln/Bonn	7
Estonia (1)	**Rank**
Tallinn/Ulemiste	1
Ireland (6)	**Rank**
Dublin	1
Cork	ó
Greece (18)	**Rank**
Athens	1
Irakleion	ó
Thessaloniki	3
Rodos	4
Kerkyra	5
Kos	6
Spain (32)	**Rank**
Madrid/Barajas	1
Barcelona	ó
Palma De Mallorca	3
Malaga	4
Las Palmas/Gran Canaria	5
Alicante	6
Tenerife Sur/Reina Sofia	7
Arrecife/Lanzarote	8
Ibiza	9
Puerto Del Rosario/ Fuerteventura	10

France (39)	Rank
Paris/Charles-De-Gaulle	1
Paris/Orly	ó
Nice/Cote D'azur	3
Lyon/Satolas	4
Marseille/Marignane	5
Toulouse/Blagnac	6
Bordeaux/Merignac	7
Italy (30)	**Rank**
Roma/Fiumicino	1
Milano/Malpensa	ó
Milano/Linate	3
Venezia/Tessera	4
Catania/Fontanarossa	5
Napoli/Capodichino	6
Palermo/Punta Raisi	7
Bergamo/Orio Al Serio	8
Torino/Caselle	9
Bologna/Borgo Panigale	10
Villafranca (Military)	11
Cyprus (2)	**Rank**
Larnaka	1
Pafos	ó
Latvia (1)	**Rank**
Riga	1
Lithuania (1)	**Rank**
Vilnius Intl	1
Luxembourg (1)	**Rank**
Luxembourg Findel	1
Hungary (1)	**Rank**
Budapest/Ferihegy	1
Malta (1)	**Rank**
Malta/Luqa	1
The Netherlands (4)	**Rank**
Amsterdam Schiphol	1
Austria (6)	**Rank**
Wien/Schwechat	1
Salzburg	ó
Poland (6)	**Rank**
Warszawa/Okecie	1
Krakow/Balice	ó
Katowice/Pyrzowice	3
Portugal (8)	**Rank**
Lisboa	1
Faro	ó
Porto	3
Madeira	4

Romania	Rank
Bucuresti/Otopeni	1
Timisoara/Giarmata	ó
Slovenia (1)	**Rank**
Ljubjana	1
Slovakia (2)	**Rank**
Bratislava	1
Finland (11)	**Rank**
Helsinki-Vantaa	1
Oulu	ó
Tampere-Pirkkala	3
Sweden (18)	**Rank**
Stockholm/Arlanda	1
Goteborg/Landvetter	ó
Malmo/Sturup	3
Stockholm/Skavsta	4
Stockholm/Bromma	5
United Kingdom (31)	**Rank**
London/Heathrow	1
London/Gatwick	ó
Manchester/Intlú	3
London/Stansted	4
Birmingham	5
Glasgow	6
Edinburgh	7
London/Luton	8
Turkey (14)	**Rank**
Istanbul/Ataturk	1
Antalya	ó
Ankara/Esenboga	3
Izmir/Adnan Menderes	4
Mugla/Dalaman	5
Iceland (3)	**Rank**
Keflavik	1
Reykjavik Ad	ó
Norway (16)	**Rank**
Oslo/Gardermoen	1
Bergen/Flesland	ó
Trondheim/Vaernes	3
Stavanger/Sola	4
Tromso	5
Bodo	6
Switzerland (3)	**Rank**
Zurich	1
Geneve/Cointrin	ó

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*	*360*	**LV**
LT			369	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	1 373	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	3 812	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	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	1 244	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.

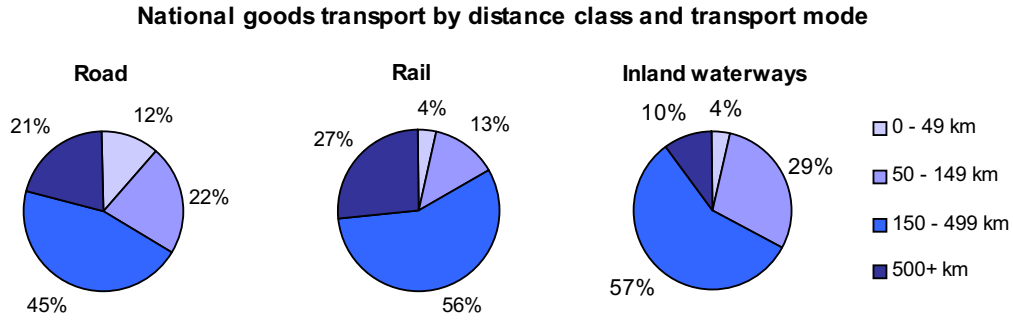
Table 37 : National transport of goods by country and mode, 1990-2005 (in million tonne-kilometres)

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



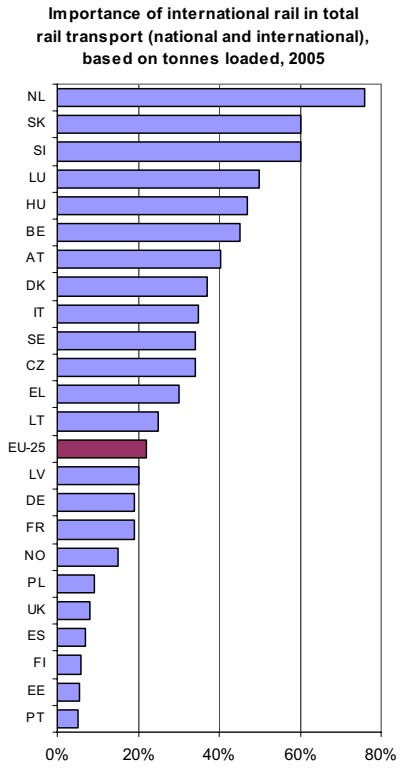
Source: Eurostat

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

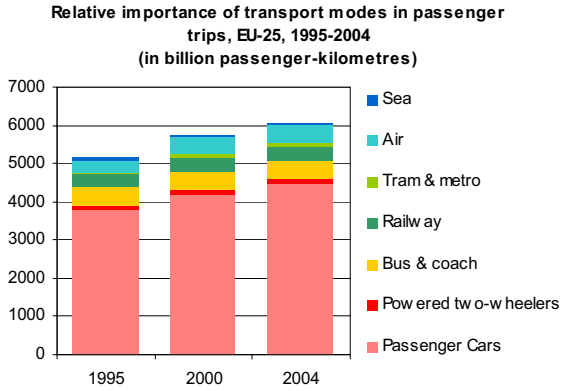
In 2004, passenger transport demand in the EU-25 (*see Figure 4*) was estimated to be over six thousand billion passenger-kilometres (pkm). This represented an increase of close to 18% over 1995 (5,149 billion pkm) and 6% on 2000 (5,733 billion pkm).

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.

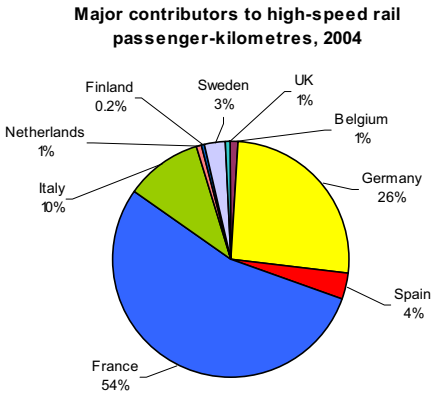
With a share of 54%, France was the largest contributor to the EU total (*see Figure 5*). In fact, high-speed rail accounted for 56% of France's total rail performance (*see Table 13*), generating 41.5 billion pkm, the highest ratio of the nine Member States with high-speed rail performance. Germany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

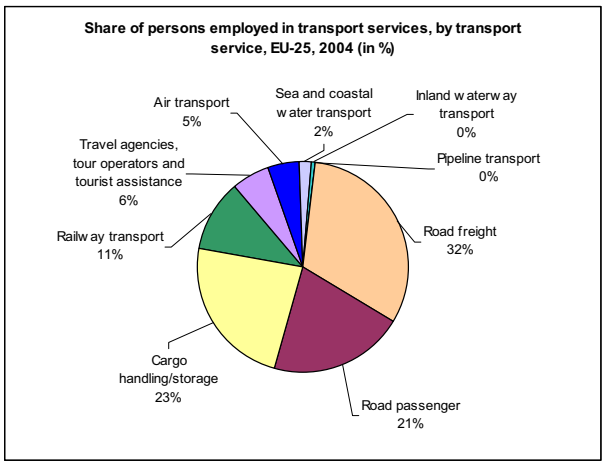
6.1.4. EMPLOYMENT

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***	**EU25**
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***	**EU15**
BE	***192 352***	63 172	32 849	565	4 928	*40 000*	778	*370*	7 977	41 713	**BE**
CZ	***277 355***	102 569	47 732	*0*	5 340	*78 500*	*816*	*673*	13 253	28 472	**CZ**
DK	***134 563***	39 085	*30 500*	12 915	11 679	8 619	120	*576*	5 778	25 291	**DK**
DE	***1 238 001***	284 527	288 945	17 875	53 002	82 627	8 803	498	61 373	440 351	**DE**
EE	***35 202***	12 589	*6 000*	*1 100*	617	*3 897*	*111*	0	1 697	9 191	**EE**
EL	***200 000***	*50 000*	*65 000*	*15 950*	*15 000*	*8 900*	*50*	*100*	*15 000*	*30 000*	**EL**
ES	***820 203***	364 949	164 787	7 065	36 086	36 377	224	0	50 868	159 847	**ES**
FR	***1 125 487***	346 082	214 329	13 165	72 210	*176 000*	3 468	*1 027*	41 249	257 957	**FR**
IE	***62 642***	16 175	9 131	*5 550*	*5 500*	*5 656*	*50*	*0*	*5 472*	15 108	**IE**
IT	***935 659***	331 597	144 522	21 711	24 600	69 164	2 813	2 970	43 363	294 919	**IT**
CY	***18 237***	2 559	2 141	3 502	2 530	0	0	0	2 584	4 921	**CY**
LV	***65 504***	14 161	15 213	627	739	15 401	15	386	1 647	17 315	**LV**
LT	***75 755***	27 716	19 384	1 677	980	*11 500*	134	*407*	1 958	11 999	**LT**
LU	***18 739***	7 411	2 205	32	3 247	3 194	40	0	669	1 941	**LU**
HU	***212 273***	69 065	55 038	22	4 076	52 776	1 304	562	6 014	23 416	**HU**
MT	***10 385***	811	1 473	734	2 279	0	0	0	1 771	3 317	**MT**
NL	***341 566***	119 179	*55 019*	*17 500*	*23 023*	*22 750*	12 213	138	22 670	69 074	**NL**
AT	***199 211***	58 572	44 013	13	8 435	46 931	337	108	12 187	28 615	**AT**
PL	***566 844***	199 578	149 811	1 918	4 881	124 139	1 224	1 329	18 679	65 285	**PL**
PT	***150 361***	58 565	*36 700*	802	8 851	4 953	917	*46*	8 276	31 251	**PT**
SI	***40 632***	17 891	4 890	*150*	605	8 228	*50*	0	2 318	6 500	**SI**
SK	***75 721***	9 595	16 410	*16*	662	*39 000*	*750*	*559*	2 093	6 636	**SK**
FI	***113 518***	38 666	24 137	7 904	7 383	8 402	225	0	4 980	21 821	**FI**
SE	***222 458***	67 233	57 227	15 937	14 243	8 556	1 090	0	12 052	46 120	**SE**
UK	***1 091 914***	298 912	213 535	16 595	85 753	56 278	1 214	385	134 752	284 490	**UK**
BG	***161 788***	*45 000*	46 788	*5 000*	2 143	*21 000*	*1 135*	*280*	5 501	34 941	**BG**
RO	***273 303***	64 007	77 815	*15 000*	*19 607*	*49 000*	4 121	*1 834*	6 408	35 511	**RO**

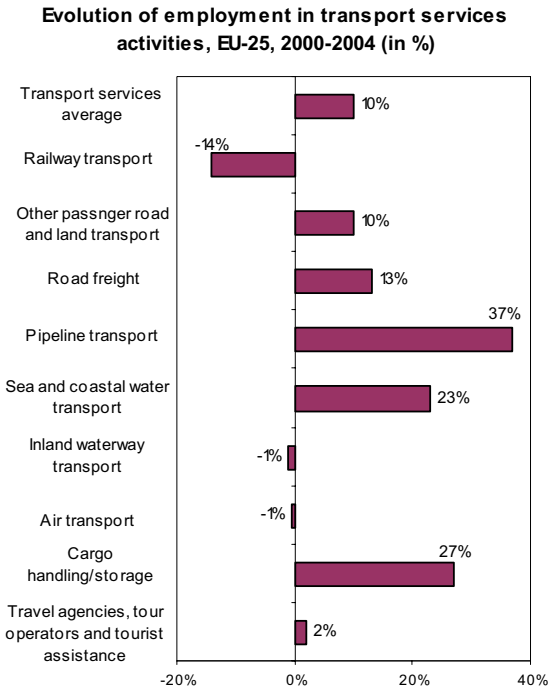
Source: Eurostat

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%.

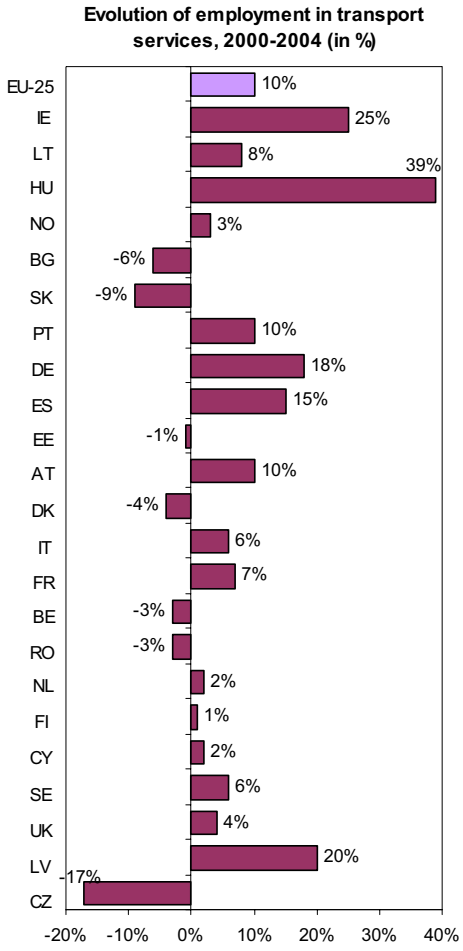
Comparing employment growth in the Member States, percentage changes went up to as much as 39% in Hungary and 25% in Ireland (*see Figure 8*). Among the main contributors to employment, Germany and Spain recorded growth of 18% and 15% respectively, significantly more than France (7%), Italy (6%) or the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

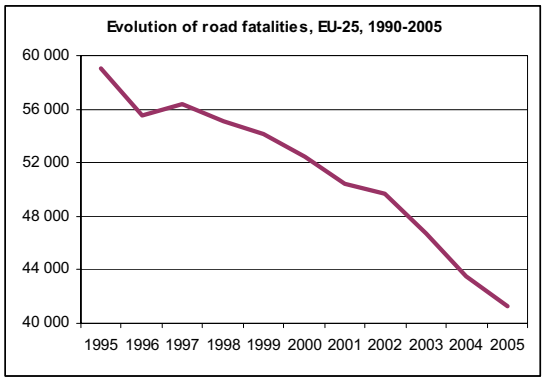
Based on available data, close to 43 000 lives were lost in traffic accidents in 2005 in the territory of the EU territory (road, rail and air traffic combined), with road accidents claiming the overwhelming majority (96%) of these.

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

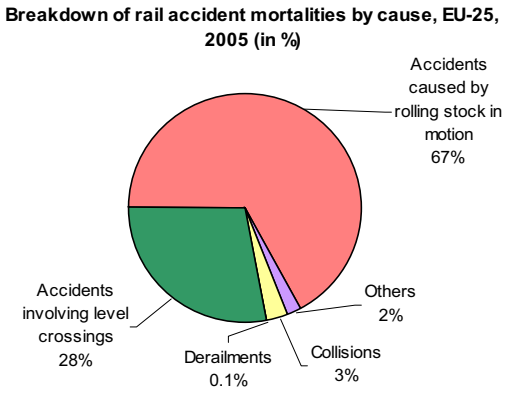
	1995	2001	2005	1995-2005		2001-2005	
				% change	% change per year	% change	% change per year
EU-25	**58 997**	**50 437**	**41 274**	**-30%**	**-3%**	**-18%**	**-5%**
EU-15	**46 098**	**39 861**	**30 959**	**-33%**	**-3%**	**-22%**	**-6%**
BE	1 449	1 486	1 089	-25%	-2%	-27%	-7%
CZ	1 588	1 334	1 286	-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 %)



Source: Eurostat