TIPP
Transport Institutions in the Policy Process

Toward Efficient and Effective Implementation of Transport Policy
TIPP Final Report

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with contributions from the partners

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EXECUTIVE SUMMARY

Starting points / objectives

Project TIPP has investigated institutional issues of transport policy implementation. The TIPP approach to investigate institutional issues was largely based on effective design and carrying out a wide range of case studies covering different situations in different parts of Europe. These case studies were as many as 20. The TIPP project was thus designed to analyse, through these case studies, how different institutional arrangements, systems and settings as well as interactions between different actors, organizations and institutions affect the implementation of transport policies.

The main objectives of the project have been:

1. To provide a comprehensive picture of institutional framework conditions for implementing transport policies throughout Europe
2. To develop an approach for studying the range of institutional implementation issues covered
3. To derive results regarding the implications and impacts of different organisational and regulatory constraints and settings
4. To develop concrete policy conclusions

TIPP has been a first project of its kind and therefore had to enter unknown territory in many respects. Naturally, to carry out genuine analysis many methodological alternatives exist and some choices had to be made. This Final Report describes what kinds of decisions the project made and what are the outcomes from these choices guiding the whole TIPP work, both in terms of the scientific contributions and the final policy recommendations. The main aim is to provide an overall synthesis of the TIPP work that would show the results obtained as clearly as possible while at the same time making transparent the way they are arrived at and also critically assessing the validity of the analyses and results.

Organisation of work / deliverables

The research work within TIPP was organised in 7 Work Packages (WPs). The work has been in three areas:

1. Methodological developments (WPs 1, 2 and 3)
2. Derivation of empirical results (WPs 4, 5 and 6)
3. Derivation of policy recommendations (WP7)

The Final Report when aiming to present an overall synthesis will focus on the relevant issues at a ‘project level’. For more details of the TIPP work the reader is asked to consult the project Deliverables (one Deliverable for each Work Package). Deliverable 1 (D1) (Niskanen et al, 2003), Deliverable 2 (D2) (May et al, 2004), and Deliverable 3 (D3) (Zografos et al, 2004) focus on methodological developments. Deliverable 4 (D4) (Seidel et al, 2004), Deliverable 5 (D5) (Peter et al, 2005), and Deliverable 6 (D6) (de Palma et al, 2005) summarise the empirical results derived in the case studies. And Deliverable 7 (D7) (May et al, 2005) offers a synthesis of the case study results and based on these derives policy recommendations.
Three themes for the case studies

The TIPP case studies, 20 in total, were designed to study three sets of policy implementation issues or problems related to:

1. Insufficient acceptability (4 case studies)
2. Inappropriate or non-optimal government structure (8 case studies)
3. Endemic industry characteristics (8 case studies)

The four case studies on insufficient acceptability summarised in D4 were:

Case Study 1: New Fare System of the DB
Case study 2: The new HGV toll in Germany
Case Study 3: Private Motorways in Hungary
Case Study 4: Road Pricing in the Netherlands

The eight case studies on inappropriate or non-optimal government structure summarised in D5 were:

Case Study 5: Recent Developments in Transport Policy Implementation in the UK
Case Study 6: Decision-Making Process for the Selection of Transport Infrastructure Projects to be Funded by the European Community Support Framework
Case Study 7: Institutional Intersections of the Decision-Making Process in Finland
Case Study 8: Changing Transport Policies in the North-West Region of Russia
Case Study 9: (De-)Centralisation of the Operation and Routine Maintenance of Federal Trunk Roads in Germany
Case Study 10: The Regional Allocation of Railway Investments in Belgium
Case Study 11: National vs. Local/Regional Authorities in Parking Policy in The Netherlands
Case Study 12: Non-Motorised Transport in Transport Policy Making: The Situation in The Netherlands and Finland

The eight case studies studies on endemic industry characteristics summarised in D6 were:

Case Study 13: International vs. EU decision-making in airline industry
Case Study 14: International vs. EU decision-making in waterborne industry
Case Study 15: Intermodal competition in French intercity passenger markets
Case Study 16: Regulatory reform of rail service in France
Case Study 17: EU initiatives in the railways and public transport sectors in Germany
Case Study 18: Experiences of Regulatory Rail Reform in the UK
Case Study 19: Public vs. Private Provision in Greece
Case Study 20: Private provision in Hungary

Derivation of overall conclusions and recommendations

A particularly important aspect or step of the TIPP project was the derivation of the overall conclusions and policy recommendations at a project level based on the results from the 20 case studies (+ 4 country surveys). The overall conclusions and policy recommendations the project did derive, reflecting the adopted approach to studying policy implementation issues, against so-called key “elements of structure and
process”. The project also structured the presentation of the conclusions and recommendations according to these same elements. These key elements were identified to be 11+9+5 in total, 11 for structures and 9+5 for processes. These elements were defined to represent all kinds of institutional factors which either represent different aspects of decision-making structures and implementation processes or can be expected to have influence on transport related decision-making and implementation of transport policies from outside. These factors were defined to include issues under all the three themes for the case studies discussed above: insufficient acceptability, inappropriate or non-optimal government structure, and endemic industry characteristics. At the level of the case studies and surveys, much effort was harnessed to investigate (in the case study and survey context) the sufficiency of the suggested categories for the key elements of structure and process and complete these where necessary: Are all elements included relevant? Are some relevant elements missing?

The structure elements included a wide range of institutional factors from the roles of the EU, other international agencies, national governments and the private sector to the degrees of centralisation and regulatory intervention and further to issues/factors like institutional consolidation, coordination across modes and the social environment. The process elements consisted of two parts. First they included “key elements of decision-making process” (9 elements) which were defined in terms of standard steps of policymaking: from the setting and quantifying of objectives, goals and targets to problem identification and perception and further to the identification of instruments and strategies, and so on, until as a final element comes monitoring, feedback and evaluation. Second, the process elements contained “generic group elements of decision-making process” (5 elements) which were defined to “act across the whole decision-making process”; these included knowledge management and the use of information; participation and consultation; conflict resolution; the involvement of interest groups; and the involvement of the media. Indeed, as said, the elements of structure and process were defined such as to cover all imaginable factors and issues that can be expected to have influence on decision-making and policy implementation in the transport sector.

Having in this way defined the key elements of structure and process, the project derived conclusions and policy recommendations separately for each of them. For each element, the relevant conclusions concerned their influence on decision-making and policy implementation, whether on their efficiency/effectiveness properties or otherwise. To that end, for each element, all case study and survey results that could be seen to illuminate the role and influence of the element were grouped together. Based on the generated sets of case study and survey results (11+9+5 in total) were drawn conclusions and policy recommendations to be presented as the project’s main outputs. The conclusions typically describe, as suggested above, the influence of the element on the efficiency/effectiveness of decision-making or policy implementation (of any relevant policy instrument identified) or the role of the element otherwise. And the recommendations suggest what should be done to improve on the role and influence of the particular element on decision-making and policy implementation.
The conclusions and recommendations

As indicated above, the TIPP conclusions and policy recommendations, such as the project has presented them, are both structured by the 11+9+5 key elements of structure and process. These elements are summarised in the following setting:

Elements of structure:
1. The role of the EU
2. The role of other international agencies
3. The role of national government
4. The degree of centralisation
5. Influences from other tiers of government
6. Influences from adjacent authorities
7. Institutional consolidation
8. The role of the private sector
9. The degree of regulatory intervention
10. Coordination across modes
11. The social environment

Elements of process:
1. Setting and quantifying objectives, goals and targets
2. Problem identification and perception
3. Identification of instruments and strategies
4. Appraisal of alternatives
5. Decision-making under uncertainty
6. Perceived effectiveness of instruments
7. Equity and fairness
8. Implementation planning and process
9. Monitoring, feedback and evaluation

More generic group of elements that could act across the whole decision-making process:
1. Knowledge management and the use of information
2. Participation and consultation
3. Conflict resolution
4. The involvement of interest groups
5. The involvement of the media

It is impossible to include here all the developed conclusions and recommendations for all these elements. Therefore, only three examples are provided, for the role of the EU, the role of the national governments, and the degree of centralisation (items 1, 3 and 4 in the structure category).

Conclusions on the role of the EU:

Infrastructure provision

Through the development of the Trans European Networks and other instruments the EU has a strong influence on the development of major infrastructure projects within the EU but also in Russia (case studies 3, 6 and 19). The presence of the European Commission in infrastructure funding – as identified in the case studies - is twofold:

- European directives and White Papers influence the aims of the infrastructure planning process. The criteria for the selection of certain measures are amended in
order to accomplish the EC’s goals. On the other hand, the decision-making processes in national infrastructure planning are re-organised in order to meet these goals. The Community Support Framework is an example for an effective instrument.

- The presence of EU funds helps to facilitate projects, which would not have been possible otherwise. As an example, the concession agreement for the development of the Athens International Airport includes provisions for a significant grant from the European Investment Bank if a sufficient amount of private capital has been secured (case study 19). Nevertheless, the realisation of the ambitious TEN program lacks national processes of priority setting that fully account for the European-wide benefits.

**Regulation**

The European Union establishes regulations, issues directives, and takes other actions that affect transport markets within and between member states. A prime example is the lead that the EU took in deregulating European airline markets in the 1990s. Open Skies Agreements have eliminated restrictions on the routes that airlines can serve, on the capacities they can provide and the fares they can charge. It is widely held that these changes have benefited travellers.

Despite its direct or indirect influence, the EU is constrained by national policies and sentiments in how quickly it can progress towards meeting its goals. For example, a nationalistic stance towards ports has induced governments to subsidise ports or take other less overt actions to strengthen their competitive positions to the detriment of the common transport market. Bilateral agreements between EU member state governments and the U.S. remain as an impediment to the efficient operation of trans-Atlantic aviation markets.

Finally, the EU faces a difficult task in deciding the scope of its Directives, and in identifying the actions that Member states should take to comply with them. A leading example of this challenge is found in the regulatory reform of railways embodied in EU Directive 91/440 and subsequent legislation. Member states vary widely with respect to how far they have implemented changes, with the UK at one pole of radical rail reform and other countries at the other end where significant liberalisation has yet to occur.

**Pricing**

The EU affects pricing directly through regulation of certain pricing thresholds (e.g. minimum levels of fuel duty and common standards for HGV pricing), and through its support of marginal social cost pricing (MSCP) as a long-term goal. However, the actual implementation of MSCP is complicated by various practical obstacles; e.g. in the case of ports by the low level of accounting transparency and by difficulties in determining the marginal costs of a port call.

**Policy recommendations concerning the role of the EU:**

- The European Union has a key role in the specification of common approaches to pricing and in determining Europe-wide regulations for competition policy, safety and the environment. This role should be maintained and if necessary enhanced by ensuring that all national governments implement the agreed schemes and regulations (CS 13, 14, 16, 17).¹

- The European Union also has an important role in specifying and financing international infrastructure projects, and in supporting projects at a regional level. While such support is welcome, care is needed to avoid such infrastructure being

¹ CS 3 refers to the case study # 3 etc.
provided in ways which are inconsistent with regional and national transport strategies (CS 3, 6, 14, 15, 19, 20).

- Concerns over subsidiarity should not be used to discourage EU involvement in regional and local transport policy. The European Union has an important role to play in encouraging consistent actions among member states and, through them, at a regional and local level. For example, the EU should endeavour to counter the tendency of member states to subsidise ports and airports. The EU is also able to disseminate good practice by comparing performance in different member states (CS 13, 14; D3).2

- The European Union was instrumental in deregulating European airline markets in the 1990s. However, bilateral agreements between EU member state governments and the US remain as an impediment to the efficient operation of transatlantic markets. These agreements should be replaced with a Common Atlantic Aviation Area. Establishing such an Area would require a multilateral effort in which the EU should play a key role (CS 13).

- Some aspects of regulation such as the opening up of rail markets are subject to wide variation of interpretation between member states. It will be important to monitor the effects of different approaches, and to tighten the specification of the regulatory structure in the light of evidence on good and less good practice. The varied experience in the UK, France and Germany raises the possibility that the EU should demand specific accompanying measures to promote competition (CS 16, 17, 18).

Conclusions for the role of national government

National government clearly has an important role to play in setting out policy and providing funding for the whole range of transport policy areas and for all modes. The key findings from the case studies however, concentrate on land-use, provision and management of infrastructure, pricing and regulation.

Case Studies 5, 6, 8 and 14 demonstrate the important role that national government plays in selecting projects to fulfil particular land-use planning objectives. In particular however, Case Studies 5 and 14 showed the need for national government intervention to ensure that local and regional competition does not lead to the over provision of transport infrastructure at the expense of the environment.

Case Studies 3, 6, 7, 8, 14 and 16 to 20 all highlighted the key role that national government has as a prime, co-funder or concessionaire manager for all new major infrastructure. It is self-evident that national governments should have a strong role in the criteria for approving, selection and monitoring of major new infrastructure. The presence of a clear and transparent process was seen to be of great importance to lower tiers of government and interest groups (e.g. case study 19).

The importance of national intervention or at least monitoring of infrastructure management was highlighted through several case studies. Case Studies 3 and 4 showed how national governments are involved in the proposing and setting of charges to manage infrastructure (see pricing for further discussion). Case Study 9 in particular shows how the absence of a strong national incentive to undertake more efficient routine maintenance of Federal trunk roads in Germany was a significant factor in sub-optimal maintenance in some regions.

With pricing, several case studies demonstrated that national governments need to provide a clear framework of principles on which pricing for infrastructure use can be charged. In the

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2 D3 refers to Deliverable 3 summarising results form the country the surveys.
absence of such a framework there is the potential for monopoly rents to be levied and for those subject to the pricing schemes to appeal against the charges on equity grounds.

In regulation, there is a clear and strong rationale for national governments to intervene in matters of safety and environmental regulation and for the provision of socially necessary services for example (demonstrated through the provisions made by national governments with respect to regulation of the airline, maritime and rail industries in case studies 13 to 18).

National governments also have a mandate to support harmonisation of environmental, tax and other policies across the EU. The evidence indicates that their track record is quite mixed. On the one hand, Case Study 15 found that the strong and centralised national decision-making system in France is generally favourable towards EU regulations and protocols. For example, the national government has set a goal of shifting freight traffic from road to rail in order to meet environmental objectives. The statements and commitments to these policy objectives are not however always supported by effective regulation as discussed below.

Partial implementation of the EC Directive 91/440 on rail has led to varying degrees of liberalisation which have different degrees of impact on efficiency and ability to deliver the policy objectives discussed above (Case Studies 15-17). In France, infrastructure management and operations have only been partially disintegrated and the national government itself acts as regulator. To date, SNCF remains the only operator of rail services. Case Study 15 concluded that the system of financial flows and contractual relationships between SNCF and the infrastructure manager, RFF, has not been conducive either to efficient usage of the infrastructure or to opening up the rail services market to competition. Indeed, the State is excessively prone to interfere with access prices and financial transfers. Germany has progressed even less than in France since the government has retained a dual role as owner and regulator of DB AG. In contrast to France and Germany, regulatory reform of the rail sector was carried out sooner and far more comprehensively in the UK. It also featured an independent regulator model that, Case Study 17 concluded, performed relatively well under the circumstances and was an essential element of the model.

Policy recommendations concerning the role of national government

- Within the context of EU policies, national governments should take the principal responsibility for specifying regulations for safety and the environment, for the regulation of national services and for the basis of competition policy. They should also specify the basis of national pricing policies for public transport and monitor performance of regional and local authorities in terms of these regulations.

- In addition they will naturally be responsible for national infrastructure, such as high speed intermodal and rail services and international transport corridors, where the size and inter-regional character of the projects dictate that they be directed at the national government level.

- National governments have a key role in providing effective institutional structures at national, regional and local levels, in facilitating an integrated approach to transport and land use policy, in providing an appropriate legislative and regulatory framework, in developing consistent approaches to financing, appraisal, monitoring and benchmarking in encouraging innovation and in supporting enhancement of skills, research and development.

- While there may be a case for changing institutional structures in order to improve them, it is important to bear in mind that such changes can cause disruption and lack of focus for a period of two to three years. Such costs need to be assessed carefully against the benefits of change.
Conclusions for the degree of centralisation:

The case studies within workpackage 5 (5 to 12) addressed the impacts of the degree of decentralisation/centralisation on the decision-making process. The hypotheses and results (in brackets) were that:

Strengths of decentralised systems are:

- Identifying local/regional preferences (confirmed)
- Generating information (partly confirmed),
- Flexibility of policy implementation (identification and implementation of institutional change in the face of new transport policy requirements) (mainly confirmed)
- Participation of individuals (partly confirmed)
- Higher transparency of decision-making processes (unconfirmed)

Strengths of centralised systems are:

- Professionalism of public decision makers (partly confirmed)
- Co-ordination of diverging local/regional interests (mainly confirmed)
- Higher variety of instruments (confirmed)
- Reduction of transaction costs of the policy making process (not confirmed)
- Consolidation of information (confirmed)
- Higher speed of policy implementation (not confirmed)
- Higher transparency of decision-making processes. (uncertain)

Further details of how these decisions were arrived at can be found in Deliverable 5.

Policy recommendations concerning the degree of centralisation:

- Centralised structures are more conducive to the coordination of diverging local interests, the use of a wider range of instruments, the consolidation of information and, potentially, a professional approach among public decision-makers. Where a decentralised approach is to be adopted, particular emphasis will be needed on these attributes. The higher tier body will need to ensure that lower tier bodies adopt consistent approaches to regulation and pricing, and to monitor their performance (CS 5, 6, 7, 9, 11, 20; D3).

- Conversely, decentralised structures are better able to identify local preferences and to adopt a flexible approach to implementation. There is some evidence, for example from Public Private Partnerships, that they also facilitate generation of information and participation of individuals. Where a centralised approach is taken, care needs to be taken to provide for these requirements (CS 19, 20; D3).

- To improve the efficiency of co-ordination, there is a case for the higher tier authority specifying objectives which the lower tier authorities should pursue, but some flexibility should be retained for lower tier authorities to pursue additional objectives where they wish to do so. This approach is necessary when there is a clear tendency for decentralised decision-making to result in a “race to the bottom” (CS 5, 7).

- Where governments decentralise decision-making to regional and local government, they need to ensure that appropriate levels of funding and know-how are also devolved, or to provide effective revenue raising powers. This will have a particular impact on infrastructure provision and maintenance policies and the support of public transport services (CS 5, 7, 11).

- Centralised structures are preferable for planning, financing, executing and maintaining long distance infrastructure investments, such as national and international corridors, for which the benefits and costs have a strong inter-regional
component, and comprehensive information is required for sound decision-making (CS 6, 9, 15, 16, 17, 18 19).

- There is conflicting evidence on whether decentralisation in the form of vertical separation of infrastructure management from service operations is advisable in network industries. This is an issue on which further evidence is needed before the EU can advise on a preferred approach (CS 15, 16, 17, 18).

**Summing up the conclusions and recommendations: specific or generic?**

As explained earlier, the research questions and hypotheses which the derivation of the project’s overall conclusions and policy recommendations focused on typically concerned the role and influence of the 11+9+5 elements of structure and process in decision-making and policy implementation. The conclusions described the current levels of influence and the current roles (what has been possible to infer based on the case studies and surveys), and the recommendations dealt with the question what should be done to improve on the influence and role of the considered elements. In summing up the conclusions and recommendations that the TIPP project has offered as its main outputs, it is useful to ask: Are the conclusions and recommendations 'specific' in the sense that they address issues of implementing particular policies and instruments, or ‘generic’ in the sense that they address issues that hold across individual policies and instruments? Has the focus been on the former types of conclusions/recommendations, on the latter types, or equally on both?

The derivation of the 11+9+5 sets of conclusions and recommendations, as described above, suggest that many of them are not restricted to any particular policy or instrument, but rather appear to deal with more generic issues that act across individual policies and instruments. Therefore, from the viewpoint of implementing particular policies and instruments, many of the conclusions and recommendations are by their nature more likely to be taken as general background information. Alternatively, they can be considered for designing institutional reforms or the like, and with broader aims than just to facilitate implementation of a particular policy or instrument. Another feature of the conclusions and recommendations is that, although some of them are clearly specific to a particular policy or instrument, individual conclusions/recommendations dealing with the policy or instrument are scattered across the 11+9+5 elements of structure and process, rather than being collected under a common title referring to the relevant policy or instrument.

Though in itself logical and understandable, the derivation and presentation of the project’s main outputs in a way just described may generate (at least) two kinds of questions. First, summarising and synthesising the case study and survey results into the project’s overall conclusions and recommendations through the 11+9+5 elements of structure and process only may strike as rather narrow and inflexible. Thinking of a typical reader this may immediately raise the question would there have been other ways for drawing and structuring the overall conclusions and recommendations, either to be used instead (as alternative) or in parallel? Second, not surprisingly, considering the actual conclusions and recommendations, presenting them separately for all of the 11+9+5 elements led to rather long lists of statements for the project to present as its main outputs. Evidently there is some room for potential misunderstandings or disappointments in these respects. Clearly it is necessary to complete the project’s presentation of its approach and conclusions/recommendations by placing these
against a more general background and as part of this also to demonstrate how these relate to the particular approach that the project had adopted.

**The TIPP methodology and approach reconsidered**

While the main purpose of the TIPP project has been to produce results, conclusions and policy recommendations that policymakers at different (EU, national, local / regional) levels would find interesting and useful, at the same time, the project was expected to derive its results, conclusions and recommendations in a way that these would be appreciated among the scientific community. This means, in particular, that the overall conclusions and recommendations which aim to synthesise the case study (and survey) results at a project level, were to be derived in a transparent way considering the theoretical foundation of the analyses and the internal logic of the reasoning leading to the result, conclusions and recommendations. This was quite a challenge for an interdisciplinary project which covered a very broad range of issues arising in a very broad range of practical situations and which investigated these issues in as many as 20 case studies (and 4 broad country surveys in addition) covering different geographical and policy areas.

This Final Report has labelled the TIPP approach to studying institutional issues of transport policy implementation as “institutions based”. The term refers to the central role that the key elements of structure and process, i.e. institutions (broadly defined as covering both formal and informal institutions) in the transport and related sectors, have had in the analysis and in the presentation of the conclusions and policy recommendations that the project has offered as its main outputs.

The thorough influence of the adopted approach/framework is particularly visible in the way the project’s overall conclusions and policy recommendations synthesising the results of the case studies (and the country surveys) are presented. As indicated above, the TIPP project arrayed the conclusions and recommendations by the elements of structure and process. As also argued, this was a logical thing for the project to do, after the particular form of the project framework was agreed upon. The procedure has been consistent with the analytical framework that the project had assumed; in fact, it has implemented the framework.

Evidently, however, the TIPP approach to investigating institutional issues of policy implementation, and for presenting the conclusions and recommendations based on the investigations, cannot be the only one possible, and may not be optimal. (This discussion in the first place refers to the derivation of the synthesized conclusions and recommendations at a project level, rather than the limited results that an individual case study or work package wishes to present based on its own analysis.) In order to be able to fully appreciate the adopted approach and the results achieved through it, and also to provide suggestions for future research based on the experiences of the TIPP study, it is necessary to consider the approach against a broader methodological background. There are two aspects here that in particular need to be allowed.

First, it is necessary to investigate the theoretical foundation of the approach itself. What is the conceptual or theoretical model underlying the derivation of the 11+9+5 elements of structure and process? To what extent is the derivation based on empirical observation only? Considering the empirical validity of the identified key elements,
are they the best or optimal ones to represent the most relevant issues in different countries? These kinds of questions need to be left for future research.

Second, it is necessary to identify possible alternative approaches, and to compare the TIPP approach with these. One such approach was suggested within the TIPP project. While the TIPP approach was labelled above as “institutions based”, this alternative approach can be labelled as “policy based”, or “CTP based”, with the CTP standing for the Common Transport Policy. Now, as the title suggests, the central role would be given to the key areas and instruments of policy (of CTP, but also extending to national policies where relevant), rather than to the institutions (i.e. the key elements of structure and process) as in the TIPP approach. Under this approach, after identifying the relevant policy areas and instruments, the research questions and hypotheses could be defined to deal with institutional issues or problems of policy implementation, now considered against the identified policy areas and instruments (rather than against the key elements of structure and process). Again, further development of these ideas is left for future research.

An obvious resolution between these two approaches appears to be that, while the institutions based approach by construction may be natural to adopt when the primary objective of research is to produce information for designing institutional reforms, the policy based approach by its construct could be best suited for producing recommendations for implementing particular policies (given the existing institutions rather than for changing them). Of course, the need for an institutional reform may also be included in the recommendations for implementing particular policies e.g. for avoiding or lowering identified key institutional barriers. This suggests the important point that, for any particular policy or instrument, the conclusions and recommendations should distinguish between issues and actions for given institutions on one hand and issues and actions including changing the institutions on the other. That is, it is important and useful to introduce a hierarchy of results

Self-assessment

This Final Report has explained and demonstrated that, given the adopted approach to investigating institutional issues of transport policy implementation, formulated in terms of an analytical framework, the choices that the TIPP project has made considering the case studies (and the surveys) and their synthesis into the overall project conclusions and recommendations have been logical all the way. The project has consistently implemented the analytical framework that was developed and agreed. The report has aimed to make a transparent synthesis of how the framework has been implemented and how the project has benefited from it. An important part of this approach has been to consider also alternative approaches, and how they relate to the approach TIPP has adopted.

Whilst doing this, the report has also made some self-assessment and has aimed to identify and discuss potential weaknesses in the implemented approach/framework. The main purpose in this regard has been to convince that the project has been aware of alternative and also essentially different approaches that also would have been possible. To some extent this report can be seen as providing an extension of the implemented approach, and with the aim to give a broader and more comprehensive picture to avoid possible criticism for recommending in an orthodox way the one
approach only that the project had developed. Two examples are mentioned next (both of these were referred to earlier).

First, not surprisingly, presenting the conclusions and policy recommendations separately for all of the 11+9+5 elements led to rather long lists of conclusions and recommendations for the project to present as its main outputs. Trying to ‘sell’ the project’s main conclusions and recommendations to policymakers, the scientific community, the media and the public at large, through presenting them these detailed long lists, may not be an easy task. Thinking again of a typical reader, he/she may wonder whether the offered conclusions and recommendations could be summarised, somehow, in a more compact form (in 1-2 pages rather than in 10-30 pages)?

A second feature of the conclusions and recommendations such as the project has produced them is that, although some of them are clearly specific to a particular policy or instrument, individual conclusions/recommendations dealing with the policy or instrument are scattered across the 11+9+5 elements of structure and process, rather than being collected under a common title referring to the relevant policy or instrument. It may be difficult for a busy reader to identify these and to form a comprehensive picture (such as the project’s results might allow) of institutional implementation issues related to that policy or instrument. This feature highlights the obvious fact that, although the implemented structure of the conclusions and recommendations (i.e. by the elements of structure and process) may well serve the needs of a reader who likes to view and structure the issues of transport policy implementation from the perspective of institutions (what is said in relation to each of them? are they all covered? etc), the structure may be inconvenient for a reader who would like to classify and perceive institutional policy implementation issues by policy areas, policies, and individual policy instruments.

_in conclusion_

We hope that this Final Report, in contrasting the different choices made within the project, and possible alternative choices that could have been made instead, has been able to provide a broader picture against which the TIPP analyses and the achieved results, conclusions and recommendations can be assessed. This should help to increase our understanding of the issues investigated in the project, and also should help the reader to understand and appreciate the efforts and the achievements of the project overall. And in so doing can ultimately increase the potential use of the TIPP results and recommendations, whether as a basis for policymaking or further research.

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1 INTRODUCTION

Project TIPP has investigated institutional issues of transport policy implementation. The main objectives of the project have been:

1. To provide a comprehensive picture of institutional framework conditions for implementing transport policies throughout Europe
2. To develop an approach for studying the range of institutional implementation issues covered
3. To derive results regarding the implications and impacts of different organisational and regulatory constraints and settings
4. To develop concrete policy conclusions

The TIPP approach to achieving these objectives was largely based on effective carrying out a wide range of case studies covering different situations in different parts of Europe. These case studies were as many as 20. The TIPP project was thus designed to analyse, through these case studies, how different institutional arrangements, systems and settings as well as interactions between different actors, organizations and institutions affect the implementation of transport policies. The overall objective of the project has therefore been very general. This feature was further strengthened by the fact that the project aimed to cover all levels of policymaking from the local/regional to the national and the EU level.

TIPP has been a first project of its kind and therefore had to enter unknown territory in many respects. Naturally, to carry out genuine analysis many methodological alternatives exist and some choices had to be made. This Final Report describes what kinds of decisions the project made and what are the outcomes from these choices guiding the whole TIPP work, both in terms of the scientific contributions and the final policy recommendations. The main aim is to provide an overall synthesis of the TIPP work that would show the results obtained as clearly as possible while at the same time making transparent the way they are arrived at and also critically assessing the validity of the analyses and results.

The contributions of TIPP have been in three areas, or at three levels:

1. Methodological contributions
2. Main empirical results
3. Policy recommendations

The Final Report aims to investigate and highlight the project’s achievements in these three areas. We aim to summarise and assess the most important scientific results and policy recommendations of the project. We pay particular attention to the question how effectively the implemented research methodology has enabled the project exploit synergy benefit of carrying out as many as 20 case studies within a single project: What is the value added compared to the hypothetical situation where these case studies would have been carried out completely independently of each others. This is an important issue to consider, as it is the most important single question that justifies the existence of these kinds of project.
There are much further details reported in individual project deliverables that are not discussed. For more details as far the methodological part of the work the reader is asked to consult Deliverable 1 (D1) (Niskanen et al, 2003), Deliverable 2 (D2) (May et al, 2004), and Deliverable 3 (D3) (Zografos et al, 2004). In particular, there is much research done in the case studies that are not directly reviewed in this report but their analyses and results are only reflected or represented through the syntheses reports Deliverable 4 (D4) (Seidel et al, 2004), Deliverable 5 (D5) (Peter et al, 2005), Deliverable 6 (D6) (de Palma et al, 2005) and Deliverable 7 (D7) (May et al, 2005).

The rest of this report is organized as follows. Chapter 2 describes the objectives of the TIPP project and the organization of work (work package structure). Chapter 3 presents a review of the methodological contributions. Chapters 4 and 5 provide summary discussions on the main empirical results as achieved in the case studies; the former section focusing on methodological aspects (how the results were derived); the latter section focusing on the results themselves. The discussion also here is necessarily at a rather general level and cannot go into details of individual case studies. The results of individual case studies are presented in the respective case study reports and in addition are synthesised in D4-D7. Chapters 6 and 7 respectively present the main conclusions and policy recommendations such as they were synthesised in D7. Chapter 8 returns the methodological issues, and it reconsiders the adopted TIPP framework/approach and compares it to an alternative approach originally suggested in D1. Chapter 9 offers concluding comments and suggestions for further research. Chapter 10 is for references. Chapter 11 is an Annex which shows the summaries of the research work and the results achieved in different parts of the project such as reported in the Executive Summaries of D1-D7.
2 PROJECT OBJECTIVES AND ORGANIZATION OF WORK

The general objectives of the TIPP project were to investigate institutional issues of transport policy implementation in Europe and based on the investigation derive recommendations for improving the efficiency and effectiveness of policymaking in practice. The research work with the aim to achieve these objectives was organised in seven work packages. The first three work packages were designed to focus on methodological developments, the next three work packages to carry out case studies, and the final work package to draw the preceding analyses together and formulate conclusions and policy recommendations.

Section 2.1 in more detail describes the objectives of the study. Section 2.2 shortly describes the structure of the methodological work as planned; Section 2.3 lists the case studies; and Section 2.4 shortly comments on the synthesis work at the final stage of the project.

2.1 Objectives of the study

The objectives of the TIPP project were:

1. To provide a comprehensive picture of institutional framework conditions (constraints and enablers) for implementing transport policies throughout Europe
2. To develop an approach for studying the range of institutional implementation issues covered, by combining elements from different fields such as the positive theories of regulation, public choice, economic theory of federalism, institutional economics (new and old), political science, sociological approaches/theories, and modern theory of cognitive psychology
3. To derive results (theoretical and empirical) regarding the implications and impacts of different organisational and regulatory constraints and settings
4. To develop, based on the above considerations, concrete policy conclusions

The results and policy conclusions (objectives 3 and 4) should in particular concern:

1. Role and impacts of the subsidiarity principle in reaching the objectives of Common Transport Policy (CTP)
2. Possible combinations of member states and European actions that would best facilitate the implementation of CTP

Transport policy and its implementation

Broadly speaking, the aim of TIPP was to examine the interaction of institutions and transport policies. Why and how do institutions choose certain policies? How do new policy needs and goals that arise in policy discussions influence existing institutions? How could new policy goals and objectives that arise for example in the course of policy discussions with various stakeholders have an impact on the existing
institutions? For example, raise awareness of possible barriers and constraints leading to actions to change the institutional set-up or efforts to modify the structure. But different institutional systems may not only differ in how efficiently they implement a given policy – they may also influence the contents of policy as actually implemented. An important question thus concerns the link to the contents of policy: Whether and how to draw a division line between policy implementation problems and the contents of policy?

There was some discussion in the beginning of the project whether it should restrict to investigating implementation problems related to a given policy (or given policies) or instead also cover issues related to policy design and decision-making prior to the actual implementation stage. The conclusion was that, because of the strong interdependencies that may exist between the different stages of the policymaking process, it is useful to cover them all. (But still, it was agreed, the focus of analysis should be on the final implementation stage.) Reflecting this view, the project decided it will also cover issues related to the interaction between the implementation problems and the contents of policy as actually implemented.

**Positive vs normative approach**

The TIPP project focused on the questions “what can be done?” and “what will be done?” rather than “what should be done?” That is, the approach was positive rather than normative. The primary objective was not to assess transport policies themselves. The ultimate aim, however, was to produce results that would help develop better policies. That is, to be able to answer the question: How should institutions be designed to make the implementation of policies efficient and effective and welfare maximising?

### 2.2 Methodological work packages (D1, D2, D3)

The first three work packages (WP1 “Setting the Stage”, WP2 “Theoretical Framework” and WP3 “Institutional Systems in Place”) focused on methodological developments. Figure 1 presents these work packages and interactions between them schematically. We next shortly characterise the contents of these work packages.

**Setting the stage (D1)**

The goal of D1 (Niskanen et al, 2003) was to set the stage for the project by tentatively identifying and discussing all relevant aspects of the project. This included discussing the main research questions and their policy relevance and links to actual policymaking at different levels (local/regional, national, EU), preliminary surveys of recent policy developments and related policy implementation problems and of possible theories and approaches for analysing them. D1 also reviewed the case studies and laid down directions for their carrying out in efficient and effective ways.
Framework for analysis (D2)

The objective of D2 (May et al, 2004) was to develop a theoretical foundation and framework for the project to be applied in the surveys and case studies, and at a later stage of the project for drawing and organising the main results and conclusions and policy recommendations. Two main areas of work here included the development of so-called analytical framework and a detailed and comprehensive review of existing theories to be potentially used in the different case studies. A particular task was to develop concrete guidance and instructions for the surveys and the case studies.

Basic surveys (D3)

The objective of D3 (Zografos et al, 2004) was to carry out the necessary surveys of institutional framework conditions in different parts of Europe. The objective was to provide a comprehensive picture of institutional framework conditions (constraints and enablers) for implementing transport policies throughout Europe. The purpose also was that D3 would develop a methodology for carrying out the surveys and based
on or allowing the theoretical principles laid down in D2 (May et al, 2003). A particular task was to develop concrete guidance and instructions for the case studies.

2.3 Case study work packages: three themes (D4, D5, D6)

Work packages (WP4 “Acceptability”, WP4 “Government Structure” and WP6 “Industry Characteristics”) carried out the case studies. Figure 1 presents these work packages and their interactions with the other work packages schematically.

*Theme 1: Acceptability related problems (D4)*

Under Theme 1 Acceptability related problems, four case studies were carried out:

- Case Study 1: New Fare System of the DB
- Case study 2: The new HGV toll in Germany
- Case Study 3: Private Motorways in Hungary
- Case Study 4: Road Pricing in the Netherlands

The analyses and results of these case studies are summarised in D4 (Seidel et al, 2004).

*Theme 2: Government structure related problems (D5)*

Under Theme 2 Government structure related problems eight case studies were carried out:

- Case Study 5: Recent Developments in Transport Policy Implementation in the UK
- Case Study 6: Decision-Making Process for the Selection of Transport Infrastructure Projects to be Funded by the European Community Support Framework
- Case Study 7: Institutional Intersections of the Decision-Making Process in Finland
- Case Study 8: Changing Transport Policies in the North-West Region of Russia
- Case Study 9: (De-)Centralisation of the Operation and Routine Maintenance of Federal Trunk Roads in Germany
- Case Study 10: The Regional Allocation of Railway Investments in Belgium
- Case Study 11: National vs. Local/Regional Authorities in Parking Policy in The Netherlands
- Case Study 12: Non-Motorised Transport in Transport Policy Making: The Situation in The Netherlands and Finland

The analyses and results of these case studies are summarised in D5 (Peter et al, 2005).

*Theme 3: Industry (transport modes) specific problems (D6)*

Under Theme 3 Industry (transport modes) specific problems eight case studies were carried out:
Case Study 13: International vs. EU decision-making in airline industry  
Case Study 14: International vs. EU decision-making in waterborne industry  
Case Study 15: Intermodal competition in French intercity passenger markets  
Case Study 16: Regulatory reform of rail service in France  
Case Study 17: EU initiatives in the railways and public transport sectors in Germany  
Case Study 18: Experiences of Regulatory Rail Reform in the UK  
Case Study 19: Public vs. Private Provision in Greece  
Case Study 20: Private provision in Hungary

The analyses and results of these case studies are summarised in D6 (de Palma et al, 2005).

2.4 Synthesis work package (D7)

The last work package (WP7 “Synthesis and Conclusions”) was planned to draw the preceding analyses together and to formulate the project conclusions and policy recommendations. The analysis and the conclusions and recommendations are presented in D7 (May et al, 2005).
3 RESULTS FROM THE METHODOLOGICAL WORK AND THE SURVEYS

Broadly speaking, the methodological part of the TIPP project focused on:

1. Analytical framework (including relevant theories and their potential usefulness)
2. Country surveys to identify existing institutional systems

The project made important choices concerning both these areas/topics.3

This Chapter 3 discusses the choices that the project has made in relation to the analytical framework and the surveys, and what are the project’s main contributions in these areas. Section 3.1 in detail discusses the framework that was presented in Deliverable 2 (D2) (May et al, 2004) and, based on the proposals of D2 was implemented within the TIPP project. To further the discussion of the important choices made in this respect and against a broader background, we return to the “framework issue” in Chapter 8 where we compare this “TIPP framework” to the approach that was suggested in Deliverable 1 (D1) (Niskanen et al, 2003).

Section 3.2 reviews the work on the country surveys as presented in Deliverable 3 (D3) (Zografos et al, 2004). Lastly, Section 3.3 offers a diagrammatic presentation of the TIPP framework and draws a summary picture of the guidelines and instructions that D2 and D3 provided for the case studies.

3.1 The TIPP framework (D2)

The key elements of the analytical framework developed in D2 (May et al, 2004) are “key dimensions” and sub-dimensions of these also labelled as “attributes” or “elements”. The main question throughout the description of these key dimensions is “is everything covered?” Besides the key dimensions, other three central concepts of the framework are: the “issues, responses and problems”, the “hypotheses”, and finally a list of “12 questions” to the surveys and the case studies to consider.4 These elements and issues are discussed in Section 3.1.1-3.1.4 next. Lastly, Section 3.1.5 summarises the guidelines/instructions that D2 provided for the surveys and the case studies based on the consideration of these elements.

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3 The justification for considering the basic surveys – both the survey methodology and the results of the surveys – together with the analytical framework and as part of the overall methodology discussion is that the results of the surveys and the analytical framework were designed to jointly form the basis for the guidance and instructions for carrying out the case studies. In a sense, all this is ‘methodology’ from the viewpoint of the case studies.

4 Originally in D2 the framework included also a fifth element, so-called “framework matrices”. In the final version of the framework in D7 these were omitted.
3.1.1 Key dimensions of transport policy

A starting point in the TIPP framework is the “key dimensions”. Deliverable 2 (D2) (May et al, 2004) identified the “key dimensions of transport policy with regard to its implementation”, as follows (p.11):

1. Objectives
2. Policy instruments
3. Barriers
4. Actors
5. Decision-making structures
6. Decision-making and implementation processes

These key dimensions were considered as covering all relevant aspects of transport policy decision-making and implementation systems. D2 focused on describing items 1-4 and identified and in detail discussed a large number of subcategories for these items also called “attributes”. Detailed identification and description of items 5 and 6 instead was left to the later parts of the project. D2 suggested that the relevant sub-categories to these items would be determined as a key result of the synthesis work based on the surveys and the case studies. D2 also suggested that these two items and their sub-categories should be given a very central role in the presentation of the project’s main empirical results and policy recommendations: the results and recommendations should be arrayed by these elements. (As will be explained below, D7 (May et al, 2005), when developing an overall synthesis of the project’s results and policy recommendations, identified 11+9+5 such subcategories, labelling them as “key elements of structure and process”, and indeed as planned arrayed the project’s results and recommendations according to them.)

D2 states:

“The first three [dimensions]… correspond to elements of policy, while the second three are concerned with process.” (p.11)5

According to this quote, “barriers” (item 3) should be seen as an “element of policy”, along with “objectives” and “instruments”. “Actors” instead should be seen as an “element of process”. The quote also says that “decision-making structures” (item 5) are “concerned with process”.6

A specific feature of the list of the six key dimensions as defined here is that the last two dimensions appear somewhat different from the first four. In a sense, they are more complex and comprehensive, and evidently more difficult to categorise and analyse. Indeed, D2, as already indicated above, whilst putting lots of effort to

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5 This quote suggests that the proposed dimensions equally cover (or apply to) “policy” and “process”. However, as set out in D2 elsewhere (the Executive Summary, chapters 1 and 2), originally the objective here was to identify “dimensions of transport policy” (pp.4, 7,10,11). Evidently D2 uses the term “transport policy” here to refer to both “policy” and “process”. An alternative interpretation is that the scope of the dimensions is extended from those of “policy” to cover both “policy and process”.

6 It thus appears, since item 6 is about “decision-making and implementation processes”, that the term “process” is used here in two different senses, or at two different levels.
presenting detailed and compete lists of relevant sub-categories for the first four items (objectives, instruments, barriers, and actors), does not try to do the same for these last two (structures and processes). D2 only provided an initial list of the elements of these two dimensions, recommending that they were reviewed in D7 in the light of the intervening research.

D2 at length discusses individual subcategories or attributes for each of the six key dimensions (though focusing on the first four, as stated above). D2 states:

“For each of these dimensions we have reviewed the existing literature to develop a taxonomy of key attributes, which are then used as the basis for the framework.” (p.5)

As far as the overall motivation and logic of the six key dimensions, D2 states:

“It will prove helpful at this stage to consider separately three different types of dimension: the policy dimensions of objectives, instruments and barriers (Box 2) [i.e. dimensions # 1, 2 and 3], which are assumed to be given in a particular situation, but which may lead actors (Box 3) [dimension # 4] to respond in particular ways, given the decision making processes (Box 4) [dimensions 5 and 6] within which they operate.” (p.44)

“One of the key challenges in developing the research method in later work packages is to identify the interactions between these three types of dimension or, more particularly, the responses which actors might make in a given decision-making context when pursuing certain policies. These responses will be influenced by the policy issues which they face, and those responses may in turn give rise to implementation problems in the decision-making process.” (pp.44,46)

Whilst an earlier quote (in this same section) distinguishes between two types of dimension, these two quotes here distinguish between “three types”. Moreover, this three-fold distinction provides a basis for the “key challenge” proposed to the later work packages, that is, the need to identify and elaborate on so-called “issues, responses and problems”, which are discussed next.

3.1.2 Issues, responses and problems

After defining the key dimensions (and sub-dimensions) as described above, an important question is how they are going to be used in the analysis of the surveys and case studies. The concept labelled as “issues, responses and problems” comes in the picture here. D2 (May et al, 2004) writes:

“The dimensions are… used to identify the possible issues, responses and problems which might arise in the pursuit of a particular policy…” (p.5 and p.63)

“...the dimensions… provide a structured approach to identifying possible issues, responses and problems.” (p.47)

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7 Boxes 2, 3 and 4 refer to the “analytical framework” figure shown in Section 3.3.1 below. In particular, the term “decision-making processes (Box 4)” as used here in fact includes both the “decision-making structures” (dimension #5) and the “decision-making and implementation processes” (dimension #6).
These quotes indicate that one of the purposes of the three types of dimension identified above is the identification of possible issues, responses and problems.

Clearly these issues, responses and problems are a central element of the proposed analytical framework considering both its understanding as a theoretical or logical construct and its practical application. This is obvious also from the diagrammatic presentation of the framework (in Section 3.5.1 below).

D2 does not characterise or categorise the issues, responses and problems at a general or principle/conceptual level, but illustrates these in terms of an example. D2 writes:

“In this simple, and almost certainly incomplete, example, the [policy] issues [that government officials face] are how to specify appropriate service levels to satisfy given objectives, within a known set of barriers and constraints, and given a particular decision-making structure. The responses can range from implementing the optimal set of changes, to negotiating with the service provider a set which balances local government and the service provider’s objectives, to implementing that subset of these which does not attract undue public opposition, to doing nothing because the problem becomes too complicated or expensive to resolve. The resulting problems can arise, for example, for local government through under-achievement, or decisions which weaken their future negotiating stance, for service providers through poor profitability, and for users through poor service coverage or reduced services.” (p.48) 8

Referring to the offered example, D2 proposed that the case studies should build their analyses based on this concept and structure their approach accordingly:

“We advocate a similar, structured approach to identifying these possible [issues, responses [and problems] in other case study contexts.” (p.48) 9

3.1.3 Hypotheses

According to D2 (May et al, 2004), the issues, responses and problems after they have been identified can in turn be developed into “hypotheses”. Another source for the hypotheses are various theories. D2 states:

“The most effective way of developing the conclusions and recommendations sought… is to generate a set of hypotheses which can be tested in the case studies… There are two principal sources of these hypotheses: the issues, responses and problems… which can… be re-specified… as a set of hypotheses; and the theories… These two sources generate…” (p.46)

“Their [i.e. theories] principal roles are in helping to understand what might be happening… in suggesting a set of hypotheses from the first principles, and in some cases in providing a scientific approach to testing those hypotheses.” (p.46)

“…the theories are another source of possible hypotheses. The hypotheses resulting from the theories will be at a more general level, and can be compared with those arising from specific case studies. Again, this is illustrated for our hypothetical case study below. It is recommended that both sources should be used for generating hypotheses.”

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8 Additions within the brackets, with the aim to clarify the interpretation, are provided by the author.

9 Additions within the brackets, with the aim to clarify the interpretation, are provided by the author.
D2 concluded that it is impossible to identify and categorise at a conceptual level the types of potential hypotheses:

“In a similar vein it would be virtually impossible to generate a full set of testable hypotheses from first principles… there are simply too many combinations of dimensions to be considered.” (p.68)

The identification and categorisation of the potential hypotheses was thus left to the surveys and the case studies to consider.

### 3.1.4 12 questions to case studies to consider

Finally, D2 (May et al, 2004) identified a set of “12 questions” to be asked at different stages of the research process. These are listed here as reproduced and revised in Deliverable 7 (D7) (May et al, 2005):

1. How comprehensive are the case studies in their coverage of the dimensions and elements?
2. How complete is the categorisation of dimensions and elements?
3. What issues, responses and problems are likely to arise when considering the pursuit of a given policy by a given actor in a given decision-making structure and process?
4. What further evidence is there of such issues, responses and problems from the results of the WP3 surveys?
5. What hypotheses should be tested in considering the pursuit of a given policy by a given actor in a given decision-making structure and process?
6. What hypotheses should be tested in the light of the relevant theories?
7. What is the evidence in the case study which might support or refute each hypothesis?
8. Is each hypothesis proven or otherwise in the relevant case study?
9. Do the results of the hypothesis tests support the underlying theories in general or in particular contexts?
10. What conclusions can we draw from the set of hypothesis tests?
11. What recommendations can we make concerning possible changes to institutional structures?
12. What recommendations can we make concerning possible changes to governance?

These general questions were in the first place designed to assist in organising the research.

### 3.1.5 Guidance/instructions to the surveys and case studies

The central elements or concepts of the TIPP analytical framework, as discussed in Sections 3.1.1-3.1.4 above, were defined to comprise of:

1. The key dimensions of transport policy
2. The issues, responses and problems
3. The hypotheses
4. The 12 questions (for the case studies to consider)
The ultimate purpose of D2 (May et al, 2004) was to develop guidance and instructions to the country surveys and the case studies. The guidance/instructions that D2 developed to the surveys and the case studies, based on the consideration of these elements/concepts for the most part concentrated on items 1 and 4, whereas items 2 and 3 were illustrated in terms of examples only. The case studies and the surveys were in particular asked to make sure that the key dimensions (objectives, instruments, barriers, actors, structures and processes) and their numerous sub-dimensions be covered and investigated. And to check whether the produced lists for these elements were complete and consequently suggest revisions where need.

The guidance/instructions that the analytical framework offered to the country surveys and the case studies thus focused in particular on stressing the importance of systematically considering whether the dimensions and their sub-dimensions such as they were identified in D2, are relevant to the case study and whether the case study is able to identify some new elements that were missing in the lists of elements that the framework had presented.

In addition, the analytical framework and the related research strategy was very explicit in proposing that the TIPP project should organise its overall results, conclusions and policy recommendations according to the last two items in the list of key dimensions: the “decision-making structures” and the “decision-making and implementation processes” as well as their sub-dimensions.

### 3.2 Country surveys (D3)

Another necessary building stone for efficient and successful case study analyses is sufficient knowledge and understanding of the existing institutional systems (decision-making and implementation structures and processes) in place in different parts of Europe. Naturally, in allowing placing of the case studies in a broader context, this is a precondition for drawing any general conclusions and policy recommendations based on these studies. Therefore, the country surveys to provide a comprehensive picture of the existing institutional arrangements, systems or settings (structures and processes) in different parts of Europe were an important part of the TIPP project.

Deliverable 3 (D3) (Zografos et al, 2004) developed a methodological approach for the surveys, including the choice of the countries to be surveyed. The countries chosen for the surveys were Finland, Germany, Greece and the UK.\(^\text{10}\) The methodology for carrying out the surveys included interviews with policymakers and experts in the respective countries based on a detailed questionnaire. D3 described the methodology and the questionnaire, described how the surveys were carried out, presented the survey results, and prepared guidance for the case studies based on these results.

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\(^\text{10}\) The rationale in surveying four countries only was that, considering the case studies it was more useful to carry out in-depth surveys of selected countries rather than broad surveys with the aim to get an overall picture of the situations throughout the Europe.
The ultimate purpose of the country surveys was to generate guidance/instructions for the case studies. An important precondition for this guidance to be maximally useful in supporting the case study analyses and in drawing the conclusions and policy recommendations based on these analyses is that they are consistent with the analytical framework. Therefore, D3 put some effort on discussing the relationship between the criteria and the key dimensions.

Section 3.2.1 next discusses how the developed survey methodology is based on the analytical framework developed in D2 (May et al, 2004). Section 3.2.2 introduces so-called “typology criteria” for surveying and analysing institutional systems and for developing a conceptual typology of European countries. Section 3.2.3 presents the results of the surveys and Section 3.2.4 the consequent guidance/instructions for the case studies.

3.2.1 Survey strategy: investigation of the key dimensions at a practical level

The survey strategy of D3 (Zografos et al, 2004) was designed to build on the theoretical foundations developed in D2 (May et al, 2004). Reflecting this planning, D3 emphasises that it draws on the “key dimensions” as identified in D2:

“The methodological approach utilized the theoretical findings of Deliverable 2 on the institutions and dimensions of the transport policy11, for investigating the said dimensions at a practical level.” (p.3)

“This approach considers the theoretical findings of Deliverable 2 concerning the institutions and dimensions of the transport policy, for the investigation of the said dimensions at a practical level.” (p.22)

The research strategy such as D3 puts it thus is “the investigation of the [key] dimensions at a practical level”. This promises a research strategy that is rather general. As discussed earlier, the “said dimensions” – the objectives, policy instruments, barriers, actors, decision-making structures, and decision-making and implementation processes – are thought to cover all relevant aspects of transport policy-making. This however was in perfect accordance with the analytical framework discussed in Section 3.1 above.

D3 thus takes the key dimensions of D2 as a basis for the methodology and consequent analyses: 12

“The methodological approach implemented in D3 expands the theoretical analysis presented in D2 in the following ways:

i) by developing a set of measurable criteria (representative of the transport policy dimensions identified in D2) that… provide, when measured, a complete, concise and easily comparable picture of the identified institutional dimensions.

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11 In reference to the discussion in Section 3.1.1 above, note that D3 talks here and consistently throughout the report about the dimensions of transport policy.

12 The quotes above introduce two key concepts or elements around which D3 builds its analysis: the “criteria” and the “typologies”. Also, the quotes indicate, the criteria come first and the typologies – or typology – are “produced” based on the criteria.
ii) by categorising the aforementioned criteria in order to produce two typologies of transport institutional settings in place.” (p.26)

We next discuss the two key developments specified in this quote, the “typology criteria” in Section 3.2.2 and the “typologies” in Section 3.2.3.

3.2.2 Typology criteria for investigating institutional systems

As indicated above (the quote at the end of the previous section), D3 (Zografos et al, 2004) set as its goal to develop “a set of measurable criteria (representative of the transport policy dimensions identified in D2)”. D3 continues:

“The elicitation of the criteria was based on the theoretical findings of D2 and specifically on the findings of Section 2 on institutional dimensions in transport policy.” (p.26)

The criteria, or “typology criteria”, as D3 also calls them, are defined as follows (pp.27-31):

1. Degree of centralization
2. Degree of participation and consultation
3. Degree of coordination across modes
4. Degree of interest group influence
5. Conflict resolution philosophy
6. Degree of regulatory intervention
7. Effective knowledge management and information availability for policy support
8. Degree of quantification of policy objectives and targets
9. Incorporation of feedback and evaluation mechanisms

D3 puts considerable effort to establish a logical relationship between these typology criteria and the key dimensions of D2 (May et al, 2004). Based on this discussion, D3 concludes that the typology criteria “are based on” the key dimensions. This of course is an important result or property to confirm and state, as it secures that the methodological developments of D3 and D2 are consistent with each other (and that the theoretical foundation of the typology criteria is also secured).

To that end, D3 provides a lengthy discussion (pp.27-31) with the aim to lay down a theoretical foundation for these nine criteria through their linkages with the key dimensions of D2 (May et al, 2004). D3 explains in detail, and criterion-by-criterion, that for each one of the criteria, a “link” to one or more of the six dimensions can be established:

“The content of the nine criteria and the theoretical linkage of each with the dimensions of transport policy identified in D2 are described below…” (p.27)

“Therefore, the nine typology criteria developed in D3 are clearly linked to the theoretical analysis of D2.” (p.31)

These quotes summarise in nutshell the linkage between the “methodological approach” which D3 has developed for the country surveys and the “theoretical analysis” of D2. The quotes (including the quote at the end of the previous section) indicate that the linkage is “theoretical” and that the nine typology criteria of D3 are
representative of the six key dimensions” of D2. D3 thus offers the interpretation that the criteria “represent” the six dimensions of D2 – but “at a practical level”. 13

In addition, although D3 does not say this directly, evidently the list of these nine criteria is meant to be exhaustive in the same way as the list of the key dimensions developed by D2 are meant to be: the proposed list of criteria is meant to cover all relevant aspects and issues of transport policy-making systems rather than only showing examples of the most important potential criteria. (This is an important principle question that arises when considering the application of the criteria in the case studies.)

3.2.3 Typology of existing institutional systems in place

Drawing on the nine typology criteria discussed above, D3 (Zografos et al, 2004) derives a “typology” of existing institutional systems in place. This D3 does through a “set of methodological steps”:

“The typology of transport institutional settings has been developed in an attempt to generalize the criteria… In order to develop these typologies in a systematic manner, a set of methodological steps has been implemented. This approach guarantees the theoretical linkage between the approach proposed in D2 and the criteria identified in D3, and the development of typologies that demonstrate both theoretical and practical foundations.” (p.31)

A first step categorises (in fact, also reorders) the nine criteria into “broader categories”:

“A prerequisite for the development of a typology is that the criteria should be classified into broader categories. The proposed classification categorises the criteria in two broad categories…” (p.4)

These “two broad categories” are interpreted to represent the “structure” and “process” of the (transport sector) decision-making environment. The “structure category” comprises three criteria: degree of centralisation, degree of regulatory intervention, and degree of interest group influence (i.e. criteria # 1, 6 and 4). Of these D3 takes the first two, and attaches a 3-scale valuation (high-moderate-low) to both. This step thus yields 3x3 = 9 typologies (potential categories for classification of countries). The “process category” covers/bundles the other six criteria (# 2, 3, 5, 7, 8 and 9); in order to represent or characterise these six criteria as a group, D3 introduces the term “degree of openness” of the decision-making system. Again a 3-scale valuation is introduced (closed-moderately open-open). Combined with the nine typologies identified in the earlier stage, this step gives 3x9 = 27 potential typologies.

13 The characterisation of the criteria as being “at a practical level” reflects the view that they are measurable: there can be more or less of the thing (phenomenon, factor) considered. Also, the wording of most of the criteria if not of all – “the degree of…” – suggests this, and also that measurement and measurability is the main issue/aspect here. By contrast, in the context of the key dimensions of D2 – objectives, policy instruments, barriers, actors, decision-making structures, and decision-making and implementation processes – rather than measurement or measurability, the primary concern appears to be whether everything is covered. Also, evidently it is this measurement perspective or property that makes the criteria “practical”, as contrasted to the dimensions, which are said to be “theoretical”.
Of these 27 potential typologies, D3 excludes nine by reasoning, so the number of typologies actually left for practical consideration is 18:14

“The combination of the two classifications described above results in the development of eighteen typologies of institutional settings on the basis of the structure of the decision-making environment and on the decision-making process. Although the number of possible combinations is twenty-seven, nine combinations have been omitted as they do not pertain to real-life institutional settings.” (p.36)

The whole range of the 18 categories, their diagrammatical illustration, and their complete titles (names) are shown in Section 11.3 of Appendix to this Final Report.

3.2.4 Results from application of the typology to four countries

D3 (Zografos et al, 2004) applied the typology described above to four countries: Finland, Germany, Greece and the UK. In principle, the aim of this kind of exercise could be twofold. First, to test the usefulness of the typology, and based on the results possibly develop the typology further and ultimately to be applied in the TIPP case studies and beyond. Second, to produce empirical results that, in characterising the four surveyed countries would be interesting and valuable as such. D3 is not explicit in this, but evidently the authors have had both these goals in mind.

The main result of this exercise says that of the 18 categories of the typology, the four surveyed countries fall into two: Finland, Germany and Greece fall into category #7 (“Moderately decentralized state-controlled / Moderately open”), and the UK into category #12 (“Moderately decentralized free-market / Open”).

D3 states (Executive Summary):

“The results of the classification of the institutional settings of the four transport sectors examined in the surveys demonstrate that:

- Finland best approximates to the typology “moderately decentralized state controlled - moderately open”.
- Germany best approximates to the typology “moderately decentralized state controlled - moderately open”.
- Greece best approximates to the typology “moderately decentralized state controlled - moderately open”.
- United Kingdom best approximates to the typology “moderately decentralized free market - open”.

It can thus be concluded that Finland, Greece and Germany can be fitted into the same typology, while the United Kingdom can be definitely ranked in a higher position both with regards its decision-making structure and its decision-making processes.”

Of course, this allocation remained very uneven. It remains for further research to show if the result i.e. the concentration of the surveyed countries to only 2 categories of 18 were obtained because the surveyed countries were somehow specific, and are

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14 Notice that D3 uses the term “typology” in two different senses: first, to refer to the whole system of categories; and second, to refer to each of the 18 categories for classifying individual countries.
not representative of the whole range of European countries. Or was the result due to the fact the 18 categories include (after eliminating 9 categories “by reasoning” as explained above) some types that are not realistic to expect to meet in practice? Another important question for further research to consider is to what extent this result and the analysis as a whole applies beyond the four surveyed countries.

### 3.2.5 Guidelines/instructions for the case studies

The ultimate purpose of the country surveys was to generate guidance/instructions for the case studies. To that purpose the country surveys collected useful reference information for the carrying out of the 20 case study analyses in efficient and effective ways, and to be able to synthesise and generalise their results in a structured way that can link the results to relevant practical situations. A particular feature to be allowed in developing the guidelines/instructions to the case studies based on the surveys was that only about half (11) of the case studies would relate to the four surveyed countries (Finland, Germany, Greece and the UK) whereas the other half (9) would deal with other European countries (Belgium, France, Hungary, Russia, The Netherlands). That is, there was a need to generalise or extrapolate the results of the surveys to these other countries as well. (Of course, in the final stage of the project when generalising the results and formulating the policy recommendations, there was the important question how well the results of the case studies apply to other European countries than involved in the study and mentioned here.)

The guidance/instructions that D3 (Zografos, et al, 2004) provided for the case studies focused on the typology criteria. D3 gave detailed instructions for each case study considering how relevant each of the typology criteria would appear to be for that case study. The main objective was to identify the most relevant criteria and to make appropriate suggestions for their possible investigation in the relevant case study contexts. In addition, the case studies of course were free to use also the other main methodological output of the D3 work, the developed typology or 18-category classification for the existing institutional systems in place.

### 3.3 Summing up the methodological work

Sections 3.1 and 3.2 above have described the key elements and principles of the analytical framework developed in D2 (May et al, 2004) and the surveys and related methodology developed in D3 (Zografos et al, 2004). This section completes this methodological discussion by providing a summing up: Section 3.3.1 depicts the original “analytical framework” figure of D2, also reproduced in D7 (May et al, 2005); Section 3.3.2 presents a “Final Report” version of the figure; and Section 3.3.3 presents in nutshell the results of the methodological work and surveys (as discussed above).

#### 3.3.1 Original analytical framework figure (D2 version)

Figure 3.3.1 shows the original figure of D2 (May et al, 2004) titled ”Analytical framework” (p. 45). The figure shows the key elements of the framework and relationships between them. As discussed in Section 3.1 above, these elements are: the key dimensions, the issues, responses and problems, the hypotheses and the 12
research questions. The figure also shows boxes for the issues, responses and problems and the hypotheses. However, these boxes are left ‘empty’ in the sense, as explained in Section 3.1, that no discussion and no categorization of classification of these sets of concepts/elements is given at a general conceptual level. The figure also shows the theories box.

D2 proposed that the TIPP case studies should consider and investigate all these elements. As far as the issues, responses and problems and the hypotheses, as stated, these were illustrated by means of a hypothetical example (of a case study), rather than e.g. in the form of general conceptual classifications of different types of problems and hypotheses. The case studies were free to determine the issues / problems they would investigate and the hypotheses they would test. Another important feature of the ‘official’ framework was that the main conclusions and policy recommendations, to be based on the results of the case studies, are proposed to be arrayed by “structures” and “processes”, and further at a more detailed level by sub-dimensions of these. (See the boxes and arrows at the bottom of the figure.) As will be discussed in Sections 6 and 7 below, Deliverable 7 (D7) (May et al, 2005) later presented the conclusions and policy recommendations in this format.

3.3.2 Modified framework figure (Final Report version)

Naturally the development of the two parallel sets of guidance/instructions offered to the case studies, on the one hand suggesting to investigate the key dimensions of D2 (May et al, 2004), and, on the other hand suggesting to investigate the typology criteria of D3 (Zografos et al, 2004), raises the question of the relationship between these two sets of issues or elements. D3 at length discussed this question, and argues that each element of the typology criteria is related to, or corresponds to one or more element(s) of the key dimensions.

Figure 3.3.2 shows diagrammatically a variant of the analytical framework that the project adopted. This presentation differs from the original D2 presentation (Figure 3.3.1) in two respects. First, it is notably simpler and more streamlined. Second, this presentation also depicts the typology criteria that the original D2 figure (also reproduced in D7) did not show. The additional element, typology criteria as introduced in D3 is placed together with the issues, responses and problems in a box titled “Problem description”.

3.3.3 Main results from the methodological work and surveys in nutshell

The methodological contributions of the TIPP project as discussed above include the analytical framework, the review and assessment of theories, the questionnaire for

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15 As explained in Section 3.1.1, a fifth element originally included in the framework as a central element, the framework matrices were omitted in the final version of the element. Figure 3.3.1 however shows these matrices too.

16 On the other hand, this made sense, because most of the case studies were scheduled to be almost completed anyway at the time the framework and the related guidance to them was finally released. So presenting the guidance to the case studies in this loose form was just stating afterwards what already had happened. See also footnote 20 to Section 4.5.
country surveys, the results of the surveys, and the guidance and instructions for the case studies. Figure 3.3.3 presents in nutshell the results of the methodological work and surveys, and what their implications to the case studies are. The figure depicts the links between D2 (May et al, 2004) and D3 (Zografos et al, 2004) and the relevant outputs of these two deliverables for consideration in the case studies.

The figure also summarises the main elements of the overall approach/framework and the guidance to the case studies as proposed by D2 and D3 and discussed in Sections 3.1 and 3.2 above. In particular, the figure presents the two key concepts and classifications discussed above – the key dimensions of D2 and the typology criteria of D3 – in a broader context. The figure also shows (in the bottom row) the main outputs of these two deliverables.
Figure 3.3.1: An analytical framework (May et al, 2004).
Figure 3.3.2: Analytical framework of TIPP (simplified and modified).
*) The idea and illustration provided in terms of an example.

**) The idea or principle and illustration provided in terms of an example.

Figure 3.3.3: Main elements and outputs of D2 (May et al, 2004) and D3 (Zografos et al, 2004).
4 THE CASE STUDY ANALYSES: KEY METHODOLOGICAL ASPECTS (D4, D5, D6)

The TIPP case studies and their results are presented in Deliverable 4 (D4) (Seidel et al, 2004), Deliverable 5 (D5) (Peter et al, 2005) and Deliverable 6 (D6) (de Palma et al, 2005). The case studies, 20 in total, were organised in three work packages, which were designed to study three sets of implementation issues related to:

1. Insufficient acceptability
2. Inappropriate or non-optimal government structure
3. Endemic industry characteristics

This Chapter 4 aims to provide a comprehensive picture of these exercises by reviewing the key methodological aspects of their approaches and analyses such as they have been reported in the respective summary deliverables D4, D5 and D6. (Chapter 5 following will present the main results, again such as they are reported in the same deliverables.) Considering the methodological aspects and contributions of individual case studies and their syntheses in D4, D5 and D6, and in order to be able to provide a comprehensive view of the empirical work in the TIPP project, it is useful to review and investigate how the case study analyses have exploited the guidance, instructions and other relevant outputs from D2 (May et al, 2004) and D3 (Zografos et al, 2004), as discussed in Chapter 3 above. However, the discussion here is necessarily at a relatively general level aiming to go into main issues and cannot go into details of individual case studies. The syntheses of the case studies as provided in the Executive Summaries of D4, D5 and D6 are reproduced in full in an Annex (Chapter 11 and Sections 11.4-11.6) to this Final Report.

Section 4.1 presents three questions for reviewing the key methodological aspects and contributions of D4, D5 and D6. Sections 4.2, 4.3 and 4.4 then respectively discuss how these three questions are dealt with in D4, D5 and D6. Section 4.4 provides a summing up.

4.1 Three questions

The key methodological aspects and contributions of D4 (Seidel et al, 2004), D5 (Peter et al, 2005) and D6 (de Palma et al, 2005), and ultimately of the individual case studies, can be reviewed through the following three questions:

1. How are the key research questions and hypotheses defined? (Question 1)
2. How are the analytical framework and other developments of the methodological part of the project used? (Question 2)
3. How is the practical organisation of hypotheses testing arranged? (Question 3)

4.2 How are research questions and hypotheses defined?

Considering the definition of research questions and hypothesis (Question 1), D4 (Seidel et al, 2004), D5 (Peter et al, 2005) and D6 (de Palma et al, 2005) emphasise
that hypotheses building and testing has been a major area and strategy in their work. As discussed in Chapter 3, the guidance/instructions that D2 (May et al, 2004) provided based on the analytical framework, did not specify at the ‘project level’ any generic research questions or hypotheses that the case studies would have requested to address. Therefore, the ‘common’ research questions and hypotheses that have been considered within the case studies are less ‘generic’ in the sense that they were developed at the ‘case study work package level’.\(^{17}\)

**Insufficient acceptability (D4)**

D4 (Seidel et al, 2004) presented the following four case studies:

- Case Study 1: New Fare System of the DB
- Case Study 2: The new HGV toll in Germany
- Case Study 3: Private Motorways in Hungary
- Case Study 4: Road Pricing in the Netherlands

D4 and the case studies it presents investigate a key policy implementation problem – the acceptability problem (the reasons for the problem to arise and the possible ways for removing the problem). The case studies investigated the influence of selected “analysis criteria” on the success or failure (acceptability) of policy implementation. These criteria represent factors and conditions that may potentially generate acceptability problems and thus may be considered for explaining success or failure of transport pricing policies. They were defined as follows:

1. Problem perception
2. Goals
3. Information provision
4. Effectiveness
5. Equity/Fairness
6. Social environment
7. Implementation process
8. Political and institutional setting

To investigate these issues, D4 present an “acceptability model”, or an “analysis matrix”, that integrates economic and psychological aspects of behaviour. D4 writes (Section 1):

“For the start of the work it was evident that we will need a framework which provides a structure for the empirical work and can be used to assess the impacts of institutional processes.”

D4 emphasises that the model they use “should better be described as a “theoretical structure” or an “analysis matrix” than as a model in the sense of modern mainstream economic theory.” The report explains that this is because the analysis is first of its

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\(^{17}\)In particular, therefore, the guidance/instructions that were given to the case studies did not identify any research questions or hypotheses that would consider potentially important policy implementation problems. Therefore, such problems and the related research questions and hypotheses were not discussed in the policy context either such that their relationship to the key policy areas (at the EU level and otherwise) would have been made transparent.
kind. As explained above, the “model” or analysis matrix identifies four groups of actors and eight “analysis criteria”. D4 also writes (Executive Summary):

“…we developed the following analysis matrix [Table 1] which has also served as the basic organising scheme for the case studies:18 … The choice of [the analysis criteria i.e. the left column of the table]… was guided by prior empirical and theoretical work of the authors and others.”

<table>
<thead>
<tr>
<th>Key actors</th>
<th>Transport providers, interest groups</th>
<th>Politicians/Regulators</th>
<th>Public, interest groups</th>
<th>Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem perception</td>
<td>1.1</td>
<td>1.2</td>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Goals</td>
<td>2.1</td>
<td>2.2</td>
<td>2.3</td>
<td>2.4</td>
</tr>
<tr>
<td>Information provision</td>
<td>3.1</td>
<td>3.2</td>
<td>3.3</td>
<td>3.4</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>4.1</td>
<td>4.2</td>
<td>4.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Equity/Fairness</td>
<td>5.1</td>
<td>5.2</td>
<td>5.3</td>
<td>5.4</td>
</tr>
<tr>
<td>Social Environment</td>
<td>6.1</td>
<td>6.2</td>
<td>6.3</td>
<td>6.4</td>
</tr>
<tr>
<td>Implementation process</td>
<td>7.1</td>
<td>7.2</td>
<td>7.3</td>
<td>7.4</td>
</tr>
<tr>
<td>Political &amp; institutional setting</td>
<td>8.1</td>
<td>8.2</td>
<td>8.3</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Table 1: The “analysis criteria” of D4 (Source: Seidel et al, 2004)

The research questions and hypotheses that D4 and the case studies considered relate to the importance of the “analysis criteria” as underlying factors or conditions (causal relationship) that may explain success or failure (acceptability) of the considered pricing policies. D4 states (Executive Summary):

“For guidance of the case studies the various cells of the matrix were filled with a large number of hypotheses.”

D4 thus derives the testable hypotheses from the assumed model; the hypotheses are thus introduced within the framework of a coherent (even though not in a formal mathematical sense) model. D4 also formulates the hypotheses in terms of concrete

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18 The numbers in the cells of the table refer to respective sections in D4.
policy implementation issues/problems, and in a form that enables a clear link from the results of hypotheses testing to policy recommendations.

**Inappropriate or non-optimal government structure (D5)**

D5 (Peter et al, 2005) presented the following eight case studies:

- Case Study 5: Recent Developments in Transport Policy Implementation in the UK
- Case Study 6: Decision-Making Process for the Selection of Transport Infrastructure Projects to be Funded by the European Community Support Framework
- Case Study 7: Institutional Intersections of the Decision-Making Process in Finland
- Case Study 8: Changing Transport Policies in the North-West Region of Russia
- Case Study 9: (De-)Centralisation of the Operation and Routine Maintenance of Federal Trunk Roads in Germany
- Case Study 10: The Regional Allocation of Railway Investments in Belgium
- Case Study 11: National vs. Local/Regional Authorities in Parking Policy in The Netherlands
- Case Study 12: Non-Motorised Transport in Transport Policy Making: The Situation in The Netherlands and Finland

D5 and the case studies focus on analysing the “strengths” of centralised and decentralised systems for transport policy decision-making. D5 writes (Executive Summary):

“This deliverable identifies the structure of government and the distribution of responsibilities between different levels of government and adjacent bodies as one possible source of problems of efficient transport policy-making. Inefficiencies are often rooted in the wrong assignment of competences and instruments. Horizontal coordination among adjacent jurisdictions or bodies is one area of interest of D5. Interlinked with this is the vertical coordination between different levels of government. Coarsely speaking, there are two areas of interest analysed in the case studies…:

- What are the possible conflicts arising between different levels of government (local-regional-national-European) and how can they be solved?
- Should there be cooperation and/or competition between adjacent governments or bodies?”

The synthesis of D5 focuses on analysing potential “strengths” of centralised and decentralised decision-making and implementation systems. The hypothesised strengths were identified as follows:

“Strengths” of decentralised systems:
1. Identifying local/regional preferences
2. Generating information
3. Flexibility of policy implementation
4. Participation of individuals
5. Higher transparency of decision-making processes

“Strengths” of centralised systems:
6. Professionalism of public decision makers
7. Co-ordinating diverging local/regional interests
8. Higher variety of instruments
9. Reducing transaction costs of the policy making process
10. Consolidation of information
11. Higher speed of policy implementation
12. Higher transparency of decision-making processes

D5 writes (Executive Summary):

“To analyse the efficiency of different organisational structures, D5 evaluates concrete structures and projects against a set of theoretically derived hypotheses with a set of ten case studies. Although the case studies cover a variety of areas, they focus on the issues of horizontal and vertical coordination. This is due to the application of the methodological framework of TIPP in the case studies.”

D5 also writes (Section 1):

“The theory of fiscal federalism - and its criticism - can be used to systematize critical aspects of government structure and degrees of (de-) centralisation. Accordingly, this deliverable uses this theory as guiding framework and as the main source for the overall hypotheses, although the theoretical base used in the case studies is more comprehensive.”

**Endemic industry characteristics (D6)**

D6 (de Palma et al, 2006) presented the following eight case studies:

- Case Study 13: International vs. EU decision-making in airline industry
- Case Study 14: International vs. EU decision-making in waterborne industry
- Case Study 15: Intermodal competition in French intercity passenger markets
- Case Study 16: Regulatory reform of rail service in France
- Case Study 17: EU initiatives in the railways and public transport sectors in Germany
- Case Study 18: Experiences of Regulatory Rail Reform in the UK
- Case Study 19: Public vs. Private Provision in Greece
- Case Study 20: Private provision in Hungary

D6 and the case studies summarised and synthesised investigated a broad range of issues. D6 writes (Section 1):

“These studies examine institutional problems of transport policy formulation and implementation related mainly to... “Problems of implementation due to endemic organisational, decision-making etc. characteristics of industry”. [Footnote: ...some of the issues that are dealt with also relate to multiple levels of government that fall into Theme 2; in particular those related to the typology criterion degree of centralisation.] Industry characteristics include the scope of transport markets (geographical, mode), the numbers and sizes of firms, the range of transport services that the firms provide, their market power, and the types of public and private agents involved in production, consumption and regulation. The industry characteristics of particular interest in D6 include the following:

- **International decision-making:** particularly for air and water modes of transport.
  Considerations that arise include the role of the EU in formulating common policies for member states, and the role of institutions such as airline alliances and the
International Air Transport Association that help to coordinate and regulate markets using less formal and voluntary mechanisms.

- **Imperfect competition**: both within modes and between modes. Economies of scale, product differentiation and other entry barriers create various degrees of market power that enable firms to set prices above competitive levels and to engage in other actions that impair efficient market operation.

- **Vertical structure**: Choice between vertical integration and vertical separation in the provision of transport infrastructure and services. Public transportation requires both infrastructure (e.g. roads, rail lines, airports and seaports) and vehicles (e.g. buses, trains, airplanes and maritime vessels). A longstanding question, particularly with respect to the rail mode, is whether the two functions should be provided by a single enterprise (vertical integration) or independently (vertical separation) with one or more firms serving each function.

- **Role of the private sector**: in the provision of infrastructure and services. Private-sector firms can be engaged in the construction and management of infrastructure, and the provision of services, through various institutional arrangements (e.g. franchises, PPPs) under different forms of regulation.

- **Intermodal considerations**: This heading includes, for both passenger and freight transport, competition between modes, the desire to promote intermodal transport, and the desire to shift traffic to environmentally-friendly modes. Major questions that arise from a policy perspective are the appropriate role of government in influencing modal shares, at what level of government any influence should be exerted, and the combination of market-oriented and regulatory tools that should be employed.

Coverage of these five problem categories by the case studies is summarised in Table [2]. Darkly shaded cells mark categories of primary importance, and lightly shaded cells coverage of secondary importance. Brief explanations for the matches are noted in the cells.”
Table 2: Coverage of D6 case studies by problem category of Theme 3 (Source: D6 (de Palma et al, 2005))

Key: Darkly shaded cells identify primary coverage, lightly shaded cells secondary coverage, and unshaded cells no significant coverage.
D6 in its synthesis focused on the influence of the typology criteria of D3 (Zografos et al, 2004) on decision-making. D6 writes (Executive Summary):

“The institutional dimensions developed in D3 are used to characterise the institutional setting prevailing in the areas of examination. This characterisation provides the background for the evaluation of a set of hypotheses, which has been tested in the case studies. The hypotheses allow an in-depth analysis of the institutional dimensions developed in D3, particularly. They have to be interpreted against the institutional background of the examined case.”

D6 however slightly modified and extended the original D3 criteria. D6 considered these criteria as factors or conditions that may explain efficiency and effectiveness of decision-making in transport sector (within industry and government). The considered ‘modified typology criteria’ are:

1. Degree of centralization
2. Degree of participation and consultation
3. Degree of coordination across modes
4. Degree of interest group influence
5. Degree of integrating conflict resolution mechanisms
6. Degree of regulatory intervention
7. Quality of knowledge management and information availability for policy support
8. Degree of quantification of policy objectives and targets
9. Degree of incorporation of feedback and evaluation mechanisms

D6 also writes (Section 3):

“Section 2.4 of Deliverable 3 developed typology criteria for institutional systems in the transport sector that characterise decision-making structures and decision-making processes. Coverage of these criteria in D6 is indicated in Table [3]. The criteria were used as an organising framework for most of the hypotheses that were tested in the case studies.”
### Table 3: Relevance of criteria to case studies (Source: D6 (de Palma et al, 2005))

<table>
<thead>
<tr>
<th>Criteria</th>
<th>6.2a</th>
<th>6.2b</th>
<th>6.3</th>
<th>6.4</th>
<th>6.5</th>
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<tr>
<td>Air transport</td>
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<td>Airports</td>
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<td>French intermodal</td>
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<td>French rail</td>
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<td>German rail</td>
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<td>UK rail</td>
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<td>Greek infrastructure</td>
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<td>X</td>
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<td>Hungarian roads</td>
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<td>X</td>
<td>X</td>
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Legend: X = relevant, -- = lesser or no relevance

### 4.3 How are analytical framework and other methodological developments used?

Considering the use of the analytical framework and other methodological developments from D2 (May et al, 2004) and D3 (Zografos et al, 2004) (Question 2), the summaries of the respective case studies in D4 (Seidel et al, 2004), D5 (Peter et al, 2005) and D6 (de Palma et al, 2005) reflect large differences in their approaches. Partly this may reflect the fact that the analytical framework and the results from the country surveys as respectively presented in D2 and D3 were not available at the time most of the case studies were actually carried out. D4, D5 and D6 when synthesising and summarising these works necessarily had to make compromises between the case study analyses actually made and the instructions and guidance provided afterwards for carrying out (or in this case rather reinterpreting) those analyses.

The discussion here investigates the approaches of and choices made in D4, D5 and D6 while focusing on the following three main elements of the framework and other methodology: 1. the key dimensions of D2; the typology criteria of D3; and the potential theories for institutional analysis as identified in D2. Clearly the discussion
in D4, D5 and D6 on the methodological contributions of D2 and D3 focused on (was restricted to) these three elements. Many other elements of the methodological work in D2 and D3 were not used or even mentioned; these ‘ignored’ elements include the issues, responses and problems of D2 and the typologies (18 in total) of D3. Evidently these were not considered very useful.

**Insufficient acceptability (D4)**

D4 (Seidel et al, 2004) does not systematically cover and check the completeness of the key dimensions of D2 (May et al, 2004), but instead focuses on identifying the key actors (Section 1):

“After defining the scope of the analysis following the dimensions of transport policy… we have categorised the actors discussed in D2 in four main groups and obtained our four key actors. …it was the primary goal of this report to analyse the interaction between the key actors and their impact on the implementation of a policy measure .... The identification of the key actors and the analysis criteria were the basis for developing the model of political acceptability. ... Finally, we compared, analysed and synthesised the results of the case studies and tried to draw general implications for a successful transport implementation process by accessing the relevance of the different analysis criteria for the interactions between the key actors.”

D4 also writes (Executive Summary):

“We discuss the relationship of this matrix to the key dimensions developed in D2 and D3… The matrix above is largely a simplification of these key dimensions.”

Considering the key dimensions of D2, a discussed above, the analysis matrix highlights the role of actors as central element of analysis. As for the typology criteria of D3, it appears that the analysis criteria can be seen as providing a complementary list of elements for the original list of typology criteria in D3. (D4 however does not offer this interpretation.)

**Inappropriate or non-optimal government structure (D5)**

D5 (Peter et al, 2005) presents three parallel syntheses of the eight case studies considered: the first by the key dimensions of D2 (May et al, 2004), the second according to the “institutional dimensions” (typology criteria) of D3 (Zografos et al, 2004), and the third according to the elements of the “strengths” of the centralised and decentralised systems as discussed in Section 4.1 above. Though D5 is not very explicit in this (does not say anything to explain why the three parallel syntheses are needed), it is possible to point out links between the three syntheses and in this way also motivating their presentation.

The purpose of the first synthesis evidently is to assess the validity of the taxonomy developed in D2 (May et al, 2004). D5 states (Executive Summary):

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19 The case study analyses reported in D4 were practically speaking finished before the ‘official’ analytical framework was presented and agreed. D4 was completed in December 2003, according to the Description of Work, whereas the analytical framework was presented and agreed in March/April 2004.
“The key dimensions developed in D2 serve as an instrument to structure and analyse the transport policy-making systems under survey. The taxonomy proposed in D2 is tested and amended.”

Considering the second synthesis, D5 writes (Section 1):

“The institutional dimensions [i.e. the “typology criteria”] developed in D3 are used to characterise the institutional setting prevailing in the areas of examination. This characterisation provides the background for the evaluation of a set of hypotheses, which has been tested in the case studies. The hypotheses allow an in-depth analysis of the institutional dimensions developed in D3, particularly. They have to be interpreted against the institutional background of the examined case. The main dimensions to inform the recommendations, alongside with the hypotheses, are:

- Centralisation
- Participation and consultation,
- Interest group influence,
- Knowledge management and information
- Interest group influence
- Regulatory intervention
- Feedback mechanisms.”

This quote can be interpreted as saying that the hypotheses in D5 that, as discussed in Section 4.1.1, focus on the strengths of centralised versus decentralised systems i.e. the first item in the list above, also allow (or require) an analysis of the influence or role of the other typology criteria developed in D3 i.e. the other items in the list. Indeed, the strengths of centralised versus decentralised systems can be thought to be influenced by a range of different factors and the other items in the list can be expected to be typical such factors. In this sense, although the hypotheses of D5 focused on the first item of the 9 typology criteria as defined in D3, also the other (8) criteria were (at least in principle) included in the analysis. In this light, the synthesis of the case studies in D5 according to the typology criteria of D3 can be seen as providing “the background for the evaluation of a set of hypotheses, which has been tested in the case studies” (cf the wording in the quote above). (Despite of this ‘understanding’ interpretation, one can still wonder whether the parallel and long syntheses as done in D5 are convenient considering a typical reader.)

D5 states about the use of theories (Section 1):

“The hypotheses… are derived from the theories suggested in D2… This deliverable uses the theory of fiscal federalism as guiding framework, although the theoretical base used in the case studies is more comprehensive.”

**Endemic industry characteristics (D6)**

D6 (de Palma et al, 2005) confirms, similarly to D5 (Peter et al, 2005) discussed above, that it builds on the key dimensions of D2 (May et al, 2004). In particular, similarly to D5, it also considered the completeness of the taxonomy of D2 (Executive Summary):
“The key dimensions developed in D2 serve as an instrument to structure and analyse the transport policy-making systems under survey. The taxonomy proposed in D2 is tested and amended.”

D6 also writes (Section 3 “Synthesis and Comparison of the Case Studies”):

“The synthesis… sections… list respectively the major actors, barriers and typology criteria that were involved in the case studies. Actors and barriers are two of the key dimensions that were identified in Deliverable 2 as a part of the methodological framework of TIPP. The typology criteria were developed in Deliverable 3 to describe decision-making and implementation structures and processes in institutional systems of the transport sector, and they underlie the organisational framework for the hypotheses that were tested.”

As indicated in Section 4.1 above, D6 formulated the relevant research questions and hypotheses (beyond those checking the completeness of the taxonomy of D2), and hence also structured its synthesis of the respective case studies, by the typology criteria of D3 (Zografos et al, 2003):

“Given the diversity of the case-study settings in terms of transport modes, market structure, sets of public and private-sector agents involved, regulations and other features, it was not possible to confine attention to a few common institutional issues although it was possible to categorise the various issues along the lines identified in Deliverables 2 and 3. The questions examined in the case studies were organised according to the typology criteria developed in Deliverable 3.”

As for the different theories that were identified in D2 and how these can be used and have been used in the case studies, D6 states (Section 3):

“Table [4] provides a summary assessment of the primary methodologies that were used in each of the case studies. These are: game theory, institutional economics, regulation theories (normative and positive), the theory of public choice and fiscal federalism. The balance of this section provides a brief overview of each methodology, and then evaluates how it was useful in conducting the case studies, in interpreting the results of the case studies, or for synthesising the results.”
### Case study Primary methodologies

<table>
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<tr>
<th>Case study</th>
<th>Primary methodologies</th>
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<tbody>
<tr>
<td>6.2a Air transport</td>
<td>Regulation theory (normative), fiscal federalism</td>
</tr>
<tr>
<td>6.2b Airports</td>
<td>Regulation theory</td>
</tr>
<tr>
<td>6.3 Ports</td>
<td>Institutional economics, fiscal federalism</td>
</tr>
<tr>
<td>6.4 French intermodal</td>
<td>Game theory, regulation theory, public choice theory</td>
</tr>
<tr>
<td>6.5 French rail</td>
<td>Game theory, regulation theory (positive &amp; normative). Public choice theory, fiscal federalism</td>
</tr>
<tr>
<td></td>
<td>Vertical separation of infrastructure management and provision of services</td>
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<tr>
<td></td>
<td>Regional decentralisation of services</td>
</tr>
<tr>
<td>6.6 German rail</td>
<td>Institutional economics, regulation theory (positive), public choice theory, game theory</td>
</tr>
<tr>
<td>6.7 UK rail</td>
<td>Game theory, institutional economics, regulation theory; interviews</td>
</tr>
<tr>
<td>6.8 Greek infrastructure</td>
<td>Regulation theory (normative); interviews</td>
</tr>
<tr>
<td>6.9 Hungarian roads</td>
<td>Institutional economics, regulation theory (positive)</td>
</tr>
</tbody>
</table>

Table 4: Primary methodologies used in case studies (Source: D6 (de Palma et al, 2005)

### 4.4 How is hypotheses testing organised?

Considering Question 3 about the practical organisation of the hypothesis testing, no formal standard scientific procedures were implemented. The term ‘hypothesis testing’ needs to be understood in a very loose sense in this context. For the most part this amounted to comparing and assessing individual case studies at the work package level (in terms of illustrative tables, etc) and drawing relevant conclusions in regard to certain specified statements based on this comparison and assessment. Only in a few cases hypothesis testing, formal or informal, was carried at the level of individual case studies.

**Insufficient acceptability (D4)**

Based on the discussion in Sections 4.1 and 4.2 above, it is obvious that in the four case studies reported in D4 (Seidel et al, 2004) all the relevant hypotheses were (developed at the case study work package level and before the actual case studies, and then were) considered at the case study level and as part of the proper case study analysis.

**Inappropriate or non-optimal government structure (D5)**

D5 (Peter et al, 2005) writes (Section 1):

“Due to the different areas of interest of the case studies, not all of the hypotheses proposed in Workpackage 5 could be tested in all of the case studies. However, the degree of application
throughout the case studies shows that they all have been relevant for Workpackage 5 and form a robust basis for generalisation and recommendations.

…
To increase the robustness and transferability of the TIPP results, the same hypotheses were tested in several case studies. Apart from that, individual hypotheses have been developed in some case studies.”

**Endemic industry characteristics (D6)**

D6 (de Palma et al, 2005) writes (Executive Summary):

“Hypotheses were formally identified and tested in some studies. In other studies the analyses were not framed in this way, and the conclusions that were drawn are described here as “lessons”.”

D6 also writes (Section 4):

“The questions and hypotheses that were examined in the case studies were organised according to the nine typology criteria developed in Deliverable 3. Hypotheses were formally identified and tested in some studies. Other studies did not set up hypotheses prior to the start of analysis, and the conclusions that were forthcoming from these studies are more aptly described as lessons. Furthermore, only some of the typology criteria that are identified in Table [3] as being relevant to a study are featured in the hypothesis tests or conclusions.”

**4.5 Summing-up: key features, similarities, dissimilarities**

The purpose of the common analytical framework within TIPP was to secure that the carrying out of the as many as 20 case studies together within a single project, in parallel and in interaction (rather than independently and in isolation), can provide maximum synergy benefits. Though putting much effort to developing the analytical framework, a deliberate decision was made not to consider generic research questions or hypotheses as part of (or based on) the framework. As discussed earlier, this aspect was not considered important or necessary given the overall research strategy adopted. Because such generic research questions and hypotheses (e.g. related to potential implementation problems) were not discussed or categorised at a general / conceptual level and hence at the “project level”, the guidance/instructions to the case studies did not include such research questions or hypotheses either.

As a consequence, in the absence of commonly discussed (and accepted) generic research questions and hypotheses, D4 (Seidel et al, 2004), D5 (Peter et al, 2005) and D6 (de Palma et al, 2005) each developed their own sets of hypotheses. These hypotheses mostly focused on general properties of the decision-making and implementation systems (efficiency of centralized systems versus decentralized ones as in D5) or the impacts of certain factors/conditions on the efficiency of decision-making and policy implementation (as in D6), rather than on selected aspects of these

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20 The case study work packages developed their own sets of hypotheses; at least seemingly independent as no obvious relationships between them were shown or highlighted. This observation does not deny that the hypotheses were not at least loosely linked, it rather refers to the process through which the analysis criteria in D4, the hypotheses strengths of centralised and decentralised systems in D5, and the modified typology criteria in D6 were developed. The text below (in the next paragraph) offers one explanation how these three sets of issues and hypotheses can be seen to relate to each other.
systems, or selected implementation problems. D4 however considered hypotheses that directly addressed the acceptability problem as a policy implementation problem.

In this situation, in the absence of generic (at the project level) research questions and hypotheses, however, the 9 typology criteria of D3 provided a useful reference list in relation to which the different sets of issues and hypotheses addressed in the three case study work packages can be (and in fact partly were) positioned. First, the analysis criteria that D4 developed for the basis of their hypotheses can be seen as complementing the original D3 list of criteria so as to allow acceptability aspects. This was rational thing for D4 to do, because the typology criteria of D3 did not include acceptability-related elements. They solely (mostly) focused on issues related to government’s decision-making systems (structures and processes). Second, D5 chose one of the typology criteria of D3 – the degree of (de)centralization – and focused on developing hypotheses related to this. Third, D6 took the whole set of the typology criteria of D3 as they were defined to be the basis for the hypotheses they considered, only slightly modifying them.

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21 Some comments received during the work requested D4 to implement the typology criteria of D3 such as they were. Certainly many (if not all) of the typology criteria of D3 can be commented on also in the context of the acceptability related problems addressed in D4. In particular, the guidance / instructions that D3 offers to the case studies includes detailed suggestions how to use the different elements of the typology criteria also in the case studies of D4. This of course is possible, and can also be easily recommended. Instead, the issue here of course is what are the fundamental aspects of factors (or criteria) on which the acceptability analyses in the case studies should be built. D4 introduces as such factors the analysis criteria and these are essentially different from the typology criteria of D3.
5 MAIN RESULTS FROM THE CASE STUDIES (D4, D5, D6)

Chapter 4 above reviewed and compared the key methodological features of the case study analyses, 20 in total, as presented in D4 (Seidel et al, 2004), D5 (Peter et al, 2005) and D6 (de Palma et al, 2005). The aim was to give a transparent account of how the results of the case studies were derived or arrived at, and hence to prepare for the presentation of the results. This Chapter 5 offers the presentation of the results themselves. (Chapter 6 will later present the policy recommendations based on these results.)

Similarly to Chapter 4, the discussion here is necessarily at a rather general level and cannot go into details of individual case studies. There is much valuable work done in the case studies and presented in the respective case study reports that are not directly referred to or reviewed in this report but their results and analyses are only reflected or represented through the syntheses provided by D4, D5 and D6.

Sections 5.1, 5.2 and 5.3 respectively present the main results from the case studies such as synthesised and summarised in D4, D5 and D6. More complete and detailed accounts are given in Chapter 11 in Sections 11.4-11.6 which in full reproduce, as Annex to this Final Report, the Executive Summaries of D4, D5 and D6.

5.1 Implementation problems due to insufficient acceptability (D4)

5.1.1 Influence of analysis criteria

The main results of D4 (Seidel et al, 2004) are in full presented in Section 11.4 (as Annex to this Final Report). (This section reproduces the Executive Summary of D4 as a whole.) The Executive Summary states, among other things, the following:

“Four case studies have been conducted in WP4:
1. The German Railway’s attempt to introduce a new fare system in passenger transport in the period 2002-2003
2. The attempt to introduce a toll for HGV’s in Germany (which is not completed yet).
3. The attempt to operate a private tolled motorway in Hungary (M1/M15).
4. The attempt to introduce a road pricing system in the densely populated Randstad area in the Netherlands

With the (possible) exception of the second case all of these attempts have resulted in failure. This is precisely what makes them interesting in our context, because these failures allow to identify mistakes which policy makers should try to avoid.

Case Study 1: New Fare System of the DB

The main aim of this case study… was to analyse the acceptability of a pricing system based on elasticities in the railway sector. Special attention was given to the influence of the media. To this end an extensive media analysis was conducted.

…

The case study shows a clear correlation between negative press reporting on the new fare system and political action. Nevertheless, by itself, the analysis allows no clear cut
conclusions concerning the influence of the media. It is not clear, in particular, whether the media have been leading events or following them. According to top management of the DB, however, it was the case that the negative press reporting was causal for the revision of the fare system.

With respect to the criteria listed in the analysis matrix the case study showed that the following issues were crucial for the fate of the new fare system:

1. The new fare system PEP was so complex that most people did not take the effort to understand it. The opportunity costs of time to comprehend the different discount levels in combination with their many conditions were considered not worth the benefit.

2. The problems of the old fare system (before PEP) were not evident enough for most passengers of the DB (no problem perception as basis of acceptability). Most passengers thought that overcrowding could simply be solved by increasing capacity instead of rationing it via prices. In addition, most passengers perceived other unsolved problems, like delays, as more urgent. The DB did not communicate sufficiently their motivations and aims of launching such a complete different fare system, compared to the old one.

3. The launch of the system coincided with many other negative events from a customer’s point of view. This caused additional negative press coverage during the system’s introduction.

4. People felt treated unfairly due to certain features of the system (e.g. pricing according to demand elasticities and cancellation fees). The infringement of the public’s perception of fairness played probably an important role that the system was not accepted by the public.

5. Underestimation of the role of the media by the DB AG. The new fare system met all requirements for a good media topic and offered the possibility of an emotional presentation by the media. Furthermore, the DB AG pursued a controversial communication policy.

6. Underestimation of the power of the lobby organisations of railway passengers, like “Pro Bahn” and “VCD” and their very good links to the media. The passenger organisations realised their chance to get public attention and to increase their publicity.

7. The DB was not able to act like an independent ordinary private transport company. Despite all privatisation plans the DB AG is still perceived by the public as a complete public enterprise and exposed to strong political influence by the government and the political opposition.

Case study 2: The new HGV toll in Germany

The aim of this case-study… was to show that pricing policies can overcome even serious problems within the implementation process by a strong political commitment and acceptability of all key actors.

In terms of our analysis matrix the following issues determined the success of the policy:

- The gap between the increasing road traffic and the lack of infrastructure funding was (and still is) perceived as one of the most serious problems in Germany today by all actors.
- There was a strong political consensus (that is, few goal conflicts) that a HGV toll was warranted.
- The hauliers support its introduction because they feel that it will increase the fairness of competition with foreign truckers. They see clearly that basing the financing of the road infrastructure on user fees will lead to a levelling of the playing field because German and foreign trucks will pay the same charge. Under the former system foreign truckers could profit from the lower level of gasoline taxes in their home countries by avoiding refueling in Germany. (The capacity of modern HGV tanks makes this possible.) The Eurovignette system (taken together with the corresponding agreements on minimum levels of gasoline taxes and motor vehicle taxes) was intended to mitigate these competitive disadvantages to a certain degree but still the German truckers felt themselves treated in an unfair
manner. Thus fairness considerations played a role here too. (It must be said, however, that in economics fairness of competition is rather a matter of guaranteeing economic efficiency than a matter of ethical judgement.)

- Politicians support the system for the following reasons:
  - The revenues will raise money for infrastructure investment
  - The toll will help to price some HGV traffic off the motorways and onto the railway. The first effect is popular with car drivers (who do not pay any toll but benefit from less congestion). The second effect is popular with environmentally concerned voters and the railway industry.

In this way almost all actors profit from the system. In terms of economic theory the introduction of the HGV toll is a Pareto improvement. In addition, this policy measure is considered to be effective and it violates nobody’s perception of fairness. Therefore even the embarrassing technical problems and at times sarcastic reporting in the media could not stop the plans to introduce the toll.

**Case Study 3: Private Motorways in Hungary**

The case study “Political history / acceptability of private financing in Hungary as an accession country”… analysed the implementation process of privatisation in the case of the motorway M1/M15 which was the first privately financed infrastructure project in Hungary.

In terms of our analysis matrix the following factors determined the failure of the policy:

- The economic foundations were based on far too optimistic traffic forecasts. (This emphasises the role of information provision in the implementation process.)
- The public felt unfairly treated because of the high toll rates, which lead to two court cases against the operating company.
- The institutional framework in Hungary was very susceptible to what economists call “regulatory risk”. Regulatory risk refers to a situation where the private investor has already made his investments (in the form of “sunk costs”) and where accordingly he becomes exploitable by the government or the regulatory authorities. Infrastructure by its very nature is used by a large part of the (voting) population. As a consequence politicians have an incentive to exploit the investor’s weak bargaining situation by lowering user charges. But they can do this only in an environment without strong institutional safeguards against such an opportunistic behaviour (e.g. a strong tradition of protecting property rights, or strong and independent courts, etc.). Apparently Hungary’s institutions at present do not offer enough of a safeguard against such behaviour.

**Case Study 4: Road Pricing in the Netherlands**

This case study… was again intended to show the importance of interest groups and the media for transport policy implementation.

In terms of our analysis matrix the most important criteria to explain the failure of Rekeningrijden are information provision (an insufficient communication policy of the government), a lack of the perceptions that the policy measure would be effective and the feeling that Rekeningrijden would amount mainly to a redistribution of income to the state.

With respect to communication, the government in the Netherlands failed to explain the working of prices in a convincing manner. Even though the population seems to be very aware of the congestion problems in the Randstad area the government apparently was not able to explain to the public that road pricing would be an effective means of dealing with this problem. Many people apparently believed (and continue to believe) that road building is still the most effective way to cope with congestion. This is quite similar to the DB’s problem in Case Study 1 above to explain the workings of yield management as an instrument to ration capacity and to guide investment.
The same holds true for the role of the media. Like in the case of the DB’s new fare system a small group of institutions and interest groups was able to fight Rekeningrijden successfully by finding the right access to the media. This once more points out the importance of thinking out a well defined media policy before the phase of implementation of a certain policy measure in transportation takes place.

Like in all road pricing schemes concerns of equity have played an important role in the failure of Rekeningrijden, though not a dominant one according to the Dutch case study researchers. Interestingly, in this case it may have been that notions of geographical equity were violated rather than notions of horizontal or vertical equity as is normally the case with respect to road pricing proposals. Horizontal equity implies that similar users should pay the same toll. Vertical equity demands that the distribution of costs and benefits should reflect people’s needs and abilities. A uniform toll of x Euro may be horizontally equitable because everybody pays the same amount. Nevertheless the toll may be considered to be vertically inequitable because it imposes a higher relative burden on the poor than the rich. With respect to Rekeningrijden it was clearly the case that there was discrimination between Dutch citizens according to their place of residence. Tolling was only intended for inhabitants of the Randstad area not for the rest of the population. This violation of geographical equity may have contributed to the failure of Rekeningrijden but, apparently has not dominated the discussion. It was not so much the redistribution among income groups that played a role but rather the redistribution of income to the state that would be effected by the road pricing scheme.

Thus, the most important cause for the failure of Rekeningrijden was the feeling of the Randstad population that their personal welfare would be reduced with the introduction of tolling. Many believed that the only effect of Rekeningrijden would be to lower their disposable income without generating any substantial effect on congestion. Thus, in terms of our analysis matrix it was mainly lacking perceived effectiveness and deficiencies in the way the scheme was communicated to the public that caused the failure of Rekeningrijden.”

5.1.2 Other results and lessons, recommendations

Seidel et al (2004) summarise their finding as follows (Executive Summary):

“This workpackage has focused on acceptability, but it became obvious that acceptability is only one part of the implementation process, besides e.g. the decision-making structure, technological and financial issues. Within the acceptability theme, however, it emerged from the theoretical analysis and the case studies that the factors and actors identified in our analysis matrix do indeed play a decisive role in the implementation process, largely in the way we expected from the theoretical analysis.

Taking into account that our results are in line with earlier work on the acceptability issue it seems that there is now at least some reliable scientific consensus about the structure of acceptability. There is agreement about the factors that determine success or failure of a certain policy. Likewise there is agreement about the groups of actors that play a key role in the transport policy process. However, the same does not hold true for the relationships between these key actors and how these relationships change over time, for instance by coalition forming. The analysis presented in this deliverable revealed how important interdependencies between the key actors are, but the analysis also showed that at the moment there is an insufficient understanding of them. This is probably not so much a deficiency with respect to the knowledge of facts, but rather a lack of synthesis between disciplines dealing with the relations between different actors. A first attempt to overcome this gap has been made here by incorporating economic and psychological concepts. Further research should
also take approaches from political sciences into account in order to examine policy processes (e.g. network analysis).

One weakness of the categorisation of actors used here is, that it is overly coarse. It does not account for heterogeneity of interests within groups. For example, in the case of toll schemes within the group of transport providers there may be enterprises that benefit from the scheme, such as the operating company and thus try to influence the policy implementation positively. On the other hand there may be enterprises that are negatively affected by the scheme because of an increase in costs, such as road hauliers. They certainly will be more interested to prevent such a scheme. Similarly the politicians/regulators in the case of the HGV toll acted as decision-makers whereas in the case of the DB AG they only observed and reacted to it. The current categories (and this applies to other forms of categorisations as well) are not flexible enough to account for these differences. Furthermore, the case of “Rekeningrijden” shows that actors may also work together and form coalitions to achieve their goals. Thus, the categorisation of actors needs to be further developed to incorporate and reflect the different roles of groups of actors and the dynamic aspect of the interaction of key actors.

It should also be noted that in achieving our results we have taken only a first step with respect to policy advice. We have identified the actors and factors which policy-making has to take into account. Insofar we are able to give some very basic recommendations (see below) which largely amount to a list of mistakes that should be avoided. From the viewpoint of a decision-maker this is certainly not very satisfactory. A decision-maker would most likely prefer to have a set of guidelines that tells him how to frame a certain policy-measure in order to make it acceptable to the public. To our knowledge the attempt to develop such a list has not been undertaken yet. It is clear that in order to develop such a list one would have to go far beyond the analysis-matrix approach in this WP4. It would be necessary to develop a causal theory of the transport-policy process which would have to incorporate all the factors that we have identified in this research and probably more. This is certainly a formidable task and one of the big research agendas for the future.

A further conclusion concerning further research about policy implementation is, that it should regard the four areas

- acceptability
- a country’s or region’s political and legal institutions
- technological factors and
- financial issues

as modules of the overall analysis of transport policies. The characteristics of these modules is that they can be differentiated for research purposes but in practice they interact and influence each other in a complex way. Within each module further research should aim to find appropriate means for description and analysis. It should be considered which different research disciplines such as economics, psychology, sociology or political science could contribute to the analysis and how the different approaches could be synthesised.

The analysis of the four case studies leads to the following general policy recommendations, with respect to successful policy implementation:

1. The public has to understand the problem a policy measure is intended to solve (problem perception). It is important for the decision maker to spend resources on making his policies comprehensible to the audience. Otherwise the policy measure will not be accepted.

2. The public has to be convinced that the introduced policy measure will solve the problem effectively. Decision makers have to inform the public what they intend with the measure and explain its effectiveness in an easy and comprehensible way. In addition they must explain why this measure is superior to other measures that may look more plausible at first glance. For instance in the case of railway travel it is not clear to most travellers at first sight why peak-load pricing is the most efficient policy to allocate scarce railway
capacity in rolling-stock and to provide the right economic incentives for investment. Instead, most customers tend to believe that the best policy to solve the crowding of trains would be to add additional passenger cars to the existing trains or to increase frequency. It is important for politicians to explain to the public apparent contradictions like this.

3. Politicians/Transport Manager have to take possible reactions of the media into account. In particular, they should avoid as much as possible everything which allows the media or opponents to negatively emotionalise the topic. This may mean, in some cases, that the policy measure has to be adjusted to prevent a negative media response. It may well be that this adjustment will lead to substantial departures from the “first best” policy.

4. Politicians need to be aware of the fact that in cases where positive welfare effects of a policy are not obvious and where long chains of reasoning are necessary to explain the welfare gains these are likely to go unnoticed in the public debate. In such a case people will judge a policy measure only by their individual gains and losses.

5. It is important to solve possible conflicts with certain interest groups, e.g. consumer protection groups before the launch of a policy measure, to take their arguments seriously and to involve them as much as possible in the implementation process.”

5.2 Implementation problems due to inappropriate government structure (D5)

5.2.1 Efficiency of centralised and decentralised systems in decision-making

The main results of D5 (Peter et al, 2005) are presented in Section 11.5 of Appendix to this Final Report. (This section reproduces the Executive Summary of D5.) The Executive Summary states, for instance, the following

“Strengths of decentralised systems are:

- Identifying local/regional preferences [1]: confirmed
- Generating information [2]: partly confirmed
- The flexibility of policy implementation [3]: mainly confirmed
- The participation of individuals [4]: partly confirmed
- A higher transparency of decision-making processes. [5]: not confirmed

Strengths of centralised systems are:

- The professionalism of public decision makers [6]: partly confirmed
- Co-ordinating diverging local/regional interests [7]: confirmed
- A higher variety of instruments [8]: confirmed
- Reducing transaction costs of the policy making process [9]: not confirmed
- A consolidation of information [10]: mainly confirmed
- A higher speed of policy implementation [11]: not confirmed
- A higher transparency of decision-making processes. [12]: uncertain

- It is more difficult to organise people who are affected less on their individual level than people who are more affected on their individual level. [13]: confirmed
- The main cause for changes of transport policy objectives are financial barriers. [14]: rejected

The following table [Table 5] comprises the exact results of the hypotheses tested in the case studies.”
### Results of Hypotheses’ Testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>5.2 Transport Policy Implementation (UK)</th>
<th>5.3 Infrastructure Selection (Greece)</th>
<th>5.4 Institutional Intersections (Finland)</th>
<th>5.5 Changing Transport Policy (Russia)</th>
<th>5.6 (De-) Centralisation of Roads (Germany)</th>
<th>5.7 Funding Railways (Belgium)</th>
<th>5.8 Parking (The Netherlands)</th>
<th>5.9 Non-Motorised Transport (The Netherlands &amp; Finland)</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyp 1 Preferences</td>
<td>++</td>
<td>(+)</td>
<td>++</td>
<td>n.a.</td>
<td>0</td>
<td>n.a.</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Hyp 2 Information</td>
<td>(+)</td>
<td>-</td>
<td>(+)</td>
<td>n.a.</td>
<td>0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>++</td>
<td>(+)</td>
</tr>
<tr>
<td>Hyp 3 Flexibility</td>
<td>++</td>
<td>0</td>
<td>(+)</td>
<td>n.a.</td>
<td>-</td>
<td>n.a.</td>
<td>++</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Hyp 4 Participation</td>
<td>(+)</td>
<td>(+)</td>
<td>n.a.</td>
<td>(+)</td>
<td>(+)</td>
<td>n.a.</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
</tr>
<tr>
<td>Hyp 5 Transparen.</td>
<td>0</td>
<td>-</td>
<td>(+)</td>
<td>n.a.</td>
<td>-</td>
<td>n.a.</td>
<td>(+)</td>
<td>(+)</td>
<td>0</td>
</tr>
<tr>
<td>Hyp 6 Profession</td>
<td>(+)</td>
<td>0</td>
<td>(+)</td>
<td>n.a.</td>
<td>0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>++</td>
<td>(+)</td>
</tr>
<tr>
<td>Hyp 7 Co-ordinat.</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>n.a.</td>
<td>+</td>
<td>n.a.</td>
<td>++</td>
<td>n.a.</td>
<td>++</td>
</tr>
<tr>
<td>Hyp 8 Instruments</td>
<td>++</td>
<td>n.a.</td>
<td>++</td>
<td>n.a.</td>
<td>+</td>
<td>n.a.</td>
<td>n.a.</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Hyp 9 Trans. Cost</td>
<td>0</td>
<td>(+)</td>
<td>(+)</td>
<td>n.a.</td>
<td>0</td>
<td>n.a.</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hyp 10 Consolidat.</td>
<td>++</td>
<td>+</td>
<td>n.a.</td>
<td>n.a.</td>
<td>(+)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Hyp 11 Speed</td>
<td>0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hyp 12 Transparen.</td>
<td>?</td>
<td>(+)</td>
<td>++</td>
<td>n.a.</td>
<td>?</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0</td>
<td>?</td>
</tr>
<tr>
<td>Hyp 13 Organisat.</td>
<td>++</td>
<td>(+)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0</td>
<td>n.a.</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Hyp 14 Change</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>n.a.</td>
<td>(+)</td>
<td>n.a.</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Key:**

++: confirmed; +: mainly confirmed; (+): partly confirmed
0: not confirmed; ?: uncertain; -: rejected
n.a.: not available from/ not examined by this case study

Table 5: Summary of case study results in D5 (Source: Peters et al, 2005)
5.2.2 Other results and lessons, recommendations

Peter et al (2005) present the following recommendations based on their analysis (Executive Summary):

“From the case studies some recommendations can be derived how transport policy responsibilities should be allocated in federal systems. In accordance with the instruments developed in D2 we have subdivided the main tasks of transport policy making in three subtasks, as shown in [Table 6].”
<table>
<thead>
<tr>
<th>Regulation</th>
<th>National Level</th>
<th>Regional Level</th>
<th>Local Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Regulation</td>
<td>Setting of rules</td>
<td>occ. additional measures according to preferences</td>
<td>occ. additional measures according to preferences</td>
</tr>
<tr>
<td>Economic Regulation</td>
<td>Setting of rules; Regulation of national services; Monitoring of regional activities</td>
<td>Regulation of regional services; Monitoring of local activities</td>
<td>Regulation of local services</td>
</tr>
<tr>
<td>Environmental Regulation</td>
<td>Setting of rules</td>
<td>occ. additional measures according to preferences</td>
<td>occ. additional measures according to preferences</td>
</tr>
<tr>
<td>Competition Rulings</td>
<td>Setting of rules; Monitoring; Ensuring accordance with international requirements</td>
<td>Reporting to national level</td>
<td>Reporting to national level</td>
</tr>
</tbody>
</table>

**Infrastructure Provision and Management**

<table>
<thead>
<tr>
<th>Planning/Financing of Infrastructure</th>
<th>Planning/financing of national infrastructures</th>
<th>Planning/financing of regional infrastructures</th>
<th>Planning/financing of local infrastructures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Cooperation</td>
<td>Downstream coop. with regions; Ensuring quality of Community support</td>
<td>Upstream contributions to national goals; Downstream coop. with local municipalities</td>
<td>Upstream contributions to regional/national goals</td>
</tr>
<tr>
<td>Horizontal Cooperation</td>
<td>Supporting complex horizontal coordination between regions</td>
<td>Bilateral horizontal cooperation; Supporting complex horizontal coordination between local municipalities</td>
<td>Bilateral horizontal cooperation</td>
</tr>
<tr>
<td>Pricing</td>
<td>Setting of rules; Pricing national infrastructures</td>
<td>Pricing regional infrastructures</td>
<td>Pricing local infrastructures</td>
</tr>
<tr>
<td>Further Tasks</td>
<td>Provision of extremely specialized know how</td>
<td>Provision of highly specialized know how; Use of specific know how from national level</td>
<td>Use of specialized know how from upper federal levels</td>
</tr>
</tbody>
</table>

**Other Measures**

| Provision of Mobility Services     | - | Provision and coordination of mobility services according to “functional approach” (FOJ) |
| Information Provision/ Monitoring  | Development of benchmarking systems | Benchmarking activities |
| Land-use Measures                  | Setting of rules | Allocation of land-use by policy instruments |
| Compensatory Measures              | n.a. | n.a. |

Table 6: Optimised responsibilities for transport policy in federal systems (Source: Peter et al, 2005)
5.3 Implementation problems due to endemic industry characteristics (D6)

5.3.1 Influence of modified typology criteria on efficiency/effectiveness of implementation

The main results of D6 (de Palma, et al, 2006) are presented in Section 11.6 of Appendix to this Final Report. (This section reproduces some of the results presented in the Executive Summary of D6.) The Executive Summary states, among other things, the following:

“Table [7] describes the main hypotheses tested or lessons drawn in the studies.

<table>
<thead>
<tr>
<th>Hypotheses or lessons</th>
<th>6.2a</th>
<th>6.2b</th>
<th>6.3</th>
<th>6.4</th>
<th>6.5</th>
<th>6.6</th>
<th>6.7</th>
<th>6.8</th>
<th>6.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of centralisation</td>
<td></td>
<td></td>
<td>+</td>
<td>+/?</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of participation and consultation</td>
<td></td>
<td></td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of coordination across modes</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of interest group influence</td>
<td></td>
<td></td>
<td>?</td>
<td></td>
<td>-</td>
<td></td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of integrating conflict resolution mechanisms</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of regulatory intervention</td>
<td>-/?</td>
<td></td>
<td>-</td>
<td>?</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Quality of knowledge management and information availability for policy support</td>
<td>+</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of quantification of policy objectives and targets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Degree of incorporation of feedback and evaluation mechanisms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

Legend: + = favourable, - = unfavourable, ? = evidence lacking or mixed

Table 7: Hypotheses tested or lessons drawn in the case studies (Source: De Palma et al, 2005)
The main conclusions or lessons drawn by the case studies are summarised as follows:

**Degree of centralisation**

For the purpose of Deliverable 6 the degree of centralisation was assessed in terms of whether the decision-making process is controlled centrally (e.g. by the national government, or by a single vertically integrated rail company) or whether it is decentralised to lower levels of government and transport organisations (e.g. to regional governments, or to separate rail infrastructure management and train operating companies). The hypotheses examined concern whether centralisation is conducive to efficient decision-making, policy implementation, acceptability, adaptability to changing circumstances, or a favourable outcome in some other sense.

The **French intermodal** study concluded that the strong and centralised decision-making system in France has facilitated major investments, and international and multimodal transport corridors, as well as adaptation to EU regulatory policies and international resolutions. The **French rail** study also found in favour of centralisation by identifying several drawbacks of the decision in France to devolve responsibility for regional passenger rail services to regional governments. Regional decentralisation has also been undertaken in **Germany** and states have been given the freedom to procure services by tendering. The tenders that have been carried out show that cost savings of 18–38% can be expected.

The **French rail** and **UK rail** studies came to differing conclusions as to whether the institutional arrangements in France and the UK for vertical separation of rail infrastructure management and train service provision have the potential to work well. Finally, the **Hungarian roads** study hypothesised that decentralisation in the provision of road transport infrastructure is conducive to participation by the private sector, because, by bringing the regulatory authority closer to the regulated enterprise, it reduces the information asymmetry between regulators and firms.

**Degree of participation and consultation**

This criterion examines whether the authorities that are responsible for transport policy decision-making consider the opinions and proposals of other participating stakeholders and seek their consultation. The **Ports** study found that committees were helpful in furthering participation from, and consultation with, diverse sets of actors, and in bringing about two major undertakings: one involving a port expansion and the other liberalisation of a shipping market.

Similarly, the **Greek infrastructure** study concluded that a high level of participation and consultation of the various stakeholders in the financing process of Public Private Partnerships (PPPs) facilitated elicitation of private sector funds while assuring quality of services, safety and environmental standards. In contrast, the **German rail** study concluded that participation of Deutsche Bahn AG, the dominant firm in the German rail industry, has impeded opening up of the rail market to competition.

**Degree of coordination across modes**

This criterion concerns whether the policymaking processes for transport modes are integrated or fragmented by transport mode. The **French intermodal** report found that the active role played by the French national government in intermodal transport has been beneficial for planning huge investments such as the TGV passenger rail network, and in preparing for the anticipated shift of freight traffic from road to rail.

**Degree of interest group influence**
This criterion examines whether, and how, interest groups affect transport policy through their participation. The **German rail** study pointed to the influence of the CEO of DB AG in opposing vertical separation of the company – a finding consistent with the hypothesis that pressure groups with narrow professional interests tend to impede gainful reforms. Both the **Ports** and the **Hungarian roads** studies also set out to assess the strength and direction of influence of interest groups, but did not come up with definitive conclusions.

**Degree of integrating conflict resolution mechanisms**

This criterion examines the degree to which mechanisms exist for dealing with conflicting stakeholder interests. The **Ports** study examined two projects that featured a large number of government and non-government actors with a diversity of mandates and preferences. In both cases committees were formed that were receptive to suggestions for change by committee participants and helped to reduce conflicts by avoiding misunderstandings.

**Degree of regulatory intervention**

This criterion examines the degree of state intervention in the operation of the transport market. The **Airports** study reviewed the disadvantages of command-and-control approaches for managing demand at airports, and the potential advantages of using economic instruments with a lighter regulatory touch. The **Ports** study remarked on the nationalistic stance generally taken towards ports and the tendency of national authorities to subsidise ports to the detriment of efficient competition between ports at the European level. These two studies thus identified drawbacks of regulatory intervention. By contrast, four other studies concluded either that regulation was justified or that a lack of rigorous regulation might be a source of inefficiency. The **French intermodal** study found some evidence that a weak level of transport regulation in France has harmed competition and impeded the fulfilment of EU objectives. The **German rail** study was more conclusive in determining that weak regulation of DB AG has been partially responsible for its continued dominance in train operations.

The **UK Rail** report concluded that the independent regulator model that was established as part of the UK rail reform has stood up under trying circumstances. And the **Hungarian roads** determined that state intervention is advantageous in the provision and operation of privately-financed infrastructure projects – particularly in an accession country where market experience and information about risks is still limited.

**Quality of knowledge management and information availability for policy support**

For the purpose of Deliverable 6, “information” was defined in a broad sense to include access to data, availability of practical transportation models, transparency in accounting, etc. Five case studies identified a lack of data as being detrimental to successful decision-making or policy assessment. The **Air transport** study remarked that the EU does not have a systematic means for tracking the airfares paid by European passengers. The **French rail** and **UK rail** reports noted that the rail infrastructure managers in France and Britain lack information about costs and demand that they require to make sound investments. The **UK rail** study further remarked on the need for better information on the state of the rail infrastructure for maintenance and renewal purposes, the need for information on the relative costs and benefits of safety-related investment, and the regulator’s need for more general benchmarks on the costs of running a railway. Lack of data was also acknowledged by the **French intermodal** study as an impediment to the construction and calibration of transport models in France. Finally, a lack of transparency in accounting was identified in the **Ports** study as an impediment to the enforcement of rules on state aid to ports.

**Degree of quantification of policy objectives and targets**
This criterion examines whether the implementation of policy measures includes the expression of quantified goals to facilitate evaluation of the actual results of the implemented transport policy measures. The Greek infrastructure study investigated the joint hypothesis that: (a) quantified objectives and targets in the financing process enhance the efficiency of large-scale infrastructure projects in Greece, and (b) PPPs embody these characteristics more than do public-only financed projects. The joint hypothesis was supported by a detailed assessment of the concessionaire selection process, and the success of two projects.

The Hungarian roads study determined that targeting revenues on publicly financed tolled motorways for operations and maintenance is advantageous for ensuring the long-run condition of the infrastructure.

Degree of incorporation of feedback and evaluation mechanisms

This criterion concerns feedback and evaluation mechanisms for the identification of problems and inefficiencies in policy formulation and implementation. The Greek infrastructure study determined that use of these mechanisms at the selection, construction and operations stages of PPPs helps in reaching targets. By comparison, such mechanisms are signally lacking for public-only financed projects – which have been prone to problems in design, construction, operation and monitoring. The Hungarian roads study found that public hearings and supplementary negotiations with a private motorway concessionaire in response to public protests against high tolls were conducive to a final agreement that was acceptable to all parties.

Lessons and questions on the role of the EU in transport policy

The case studies in Deliverable 6 offer a few lessons, and also raise some questions, on the role of the EU in transport policy formulation and implementation. The European Union establishes regulations, issues directives, and takes other actions that affect transport markets within and between member states. As described in the Air transport study the EU was instrumental in deregulating European airline markets in the 1990s, and it is widely held that travellers have benefited. However, bilateral agreements between EU member state governments and the U.S. remain as an impediment to the efficient operation of trans-Atlantic markets. Most observers argue that these agreements should be eliminated, and replaced with a Common Atlantic Aviation Area. Establishing such an Area would require a multilateral effort in which the EU would play a key role. Another problematic aspect of European aviation is that air traffic control remains under the management of national authorities. This practice contributes to balkanisation of the system – with attendant coordination problems and flight delays. The EU could take actions to reform the air traffic control system, and replace it with a more centralised and rationalised system.

In more general terms the German rail study identified several ways in which EU initiatives can influence national transport policies. This may happen directly when politicians whose political goals are closely aligned with the EU attempt to adopt EU directives wholesale. The EU can also influence policies indirectly by increasing pressures for reform, or by providing politicians with a justification for making unpopular decisions.

Despite its direct or indirect influence, the EU is constrained by national policies and sentiments in how quickly it can progress towards meeting its goals. This was apparent in the Ports study, which described how a nationalistic stance towards ports has induced governments to subsidise ports or take other less overt actions to strengthen their competitive position.

The EU also faces a difficult task in deciding the scope of its Directives, and in identifying the actions that Member states should take to comply with them. A leading example of this
challenge is found in the regulatory reform of railways. As discussed in the French rail, German rail and UK rail studies, the reforms adopted in France, Germany and the UK have been quite different. The UK undertook the most radical reform of the three states by effecting complete separation of infrastructure management from operations, privatisation of freight services and opening of the freight market to competition, franchising of passenger services, and the creation of rolling stock leasing companies. By contrast, in Germany the infrastructure manager and the incumbent operator still belong to the same holding. France presents an intermediate case in which infrastructure and operations have been separated, but many aspects of the previous regime remain in place.

Despite some setbacks, competition in rail services has been forthcoming in the UK. But in Germany and France, entry barriers remain that provide the incumbent operators with significant competitive advantages over potential entrants. As far as insulation from political interference, the UK model again appears to have worked the best of the three countries.

The varied experience in the three countries leads to the question whether the EU followed the best course of action with respect to rail regulatory reform. Was the EU wise to insist (initially) only on separation between management and operations at the accounting level, while leaving other aspects open to experimentation by individual member states? Or should it instead have demanded specific accompanying measures to promote competition in rail services that would have forced open the French and German markets – even at the risk of inducing setbacks such as those that were experienced in the UK?”

5.3.2 Other results and lessons, recommendations

D6 (de Palma et al, 2005) write (Executive Summary):

“The case studies in Deliverable 6 offer a few lessons, and also raise some questions, on the role of the EU in transport policy formulation and implementation.

The European Union establishes regulations, issues directives, and takes other actions that affect transport markets within and between member states. As described in the Air transport study the EU was instrumental in deregulating European airline markets in the 1990s, and it is widely held that travellers have benefited. However, bilateral agreements between EU member state governments and the US remain as an impediment to the efficient operation of trans-Atlantic markets. Most observers argue that these agreements should be eliminated, and replaced with a Common Atlantic Aviation Area. Establishing such an Area would require a multilateral effort in which the EU would play a key role. Another problematic aspect of European aviation is that air traffic control remains under the management of national authorities. This practice contributes to balkanisation of the system – with attendant coordination problems and flight delays. The EU could take actions to reform the air traffic control system, and replace it with a more centralised and rationalised system.

In more general terms the German rail study identified several ways in which EU initiatives can influence national transport policies. This may happen directly when politicians whose political goals are closely aligned with the EU attempt to adopt EU directives wholesale. The EU can also influence policies indirectly by increasing pressures for reform, or by providing politicians with a justification for making unpopular decisions.

Despite its direct or indirect influence, the EU is constrained by national policies and sentiments in how quickly it can progress towards meeting its goals. This was apparent in the Ports study, which described how a nationalistic stance towards ports has induced governments to subsidise ports or take other less overt actions to strengthen their competitive position.
The EU also faces a difficult task in deciding the scope of its Directives, and in identifying the actions that Member states should take to comply with them. A leading example of this challenge is found in the regulatory reform of railways. As discussed in the French rail, German rail and UK rail studies, the reforms adopted in France, Germany and the UK have been quite different. The UK undertook the most radical reform of the three states by effecting complete separation of infrastructure management from operations, privatisation of freight services and opening of the freight market to competition, franchising of passenger services, and the creation of rolling stock leasing companies. By contrast, in Germany the infrastructure manager and the incumbent operator still belong to the same holding. France presents an intermediate case in which infrastructure and operations have been separated, but many aspects of the previous regime remain in place.

Despite some setbacks, competition in rail services has been forthcoming in the UK. But in Germany and France, entry barriers remain that provide the incumbent operators with significant competitive advantages over potential entrants. As far as insulation from political interference, the UK model again appears to have worked the best of the three countries.

The varied experience in the three countries leads to the question whether the EU followed the best course of action with respect to rail regulatory reform. Was the EU wise to insist (initially) only on separation between management and operations at the accounting level, while leaving other aspects open to experimentation by individual member states? Or should it instead have demanded specific accompanying measures to promote competition in rail services that would have forced open the French and German markets – even at the risk of inducing setbacks such as those that were experienced in the UK?”
Chapter 5 above presented the main results from the case studies such as they were summarised in D4 (Seidel et al, 2004), D5 (Peter et al, 2005) and D6 (de Palma et al, 2005). The case studies covered three main themes: D4 focused on acceptability related issues, D5 on government structure related issues, and D5 on industry (main transport modes) specific issues.

This Chapter 6 discusses how these three sets of case study results (+ results from the surveys) were synthesised in D7 (May et al, 2005) into the overall results and conclusions of the project. This approach to arraying and synthesising the results was originally introduced in D2 (May et al, 2004) and implemented in D7. This approach organises the results by the “elements of structure and process”; this approach is, as was explained in Chapter 3, a central aspect of the analytical framework that D2 had developed for the project.

Section 6.1 presents the elements of structure and process as developed in D7. Section 6.2 presents the conclusions for the elements of structure (11 elements), and Section 6.3 for the elements of process (9+5 elements). Section 6.4 which is included as Annex to this Chapter 6 shortly discusses an alternative way of classifying and structuring the conclusions as synthesised in D7.

6.1 Framework for structuring conclusions: elements of structure and process

As originally proposed in D2 (May et al, 2004), D7 (May et al, 2005) arrayed the main empirical results of the project – covering both the case studies and the surveys – by the elements of structure and process. D7 defined three groups of such elements as follows:

1. Key elements of decision-making structure (11 items)
2. Key elements of decision-making process (9 items)
3. Generic elements of decision-making process (5 items)

D7 identified complete lists of these three sets of elements as follows.

The key elements of decision-making structure:

1. The role of the EU
2. The role of other international agencies
3. The role of national government
4. The degree of centralisation
5. Influences from other tiers of government
6. Influences from adjacent authorities

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22 Sections 6.2 and 6.3 are adopted from D7, Chapter 4.
7. Institutional consolidation  
8. The role of the private sector  
9. The degree of regulatory intervention  
10. Coordination across modes  
11. The social environment

The key elements of decision-making process:  

1. Setting and quantifying objectives, goals and targets  
2. Problem identification and perception  
3. Identification of instruments and strategies  
4. Appraisal of alternatives  
5. Decision-making under uncertainty  
6. Perceived effectiveness of instruments  
7. Equity and fairness  
8. Implementation planning and process  
9. Monitoring, feedback and evaluation

The generic group elements of decision-making process:  

1. Knowledge management and the use of information  
2. Participation and consultation  
3. Conflict resolution  
4. The involvement of interest groups  
5. The involvement of the media

According to D7, these 5 generic elements “could act across the whole decision-making process”.

In order to determine these 11+9+5 elements representing the three categories of elements of structure and process, D7 drew on various lists of dimensions, criteria, etc that had been developed in D2-D6. These lists, which all have been discussed in the previous sections define:

1. Key dimensions of D2 (6 items as defined in Section 3.1.1 above)  
2. Typology criteria of D3 (9 items as defined in Section 3.1.2)  
3. Analysis criteria of D4 (8 items as defined in Section 4.2)  
4. Strengths of centralised and decentralised systems of D5 (12 items as defined in Section 4.2)  
5. Modified typology criteria of D6 (9 items as defined in Section 4.2)

D7 says that it has “combined, mixed and rearranged” these other lists in order to determine the relevant elements of structure and process. D7 emphasises that these elements were not chosen accidentally or determined ad hoc, but ‘derived’ as a result of a long and multistage process of scientific reasoning. As stated earlier in relation to D2, the elements of structure and process were to be determined as a main result of the case studies and the reviews.

D7 writes:
“In order for TIPP to make recommendations on how one might change governance of transport policy or institutional structures to enable more effective decision making it is necessary to draw together the findings from the European survey and the case studies to identify which of the elements relating to decision-making processes and structures (defined in Section 6.2) have an influence on the success or otherwise of policies. As defined in Deliverable 2, the project must answer the hypotheses “In determining the effectiveness of a decision-making structure/process the following elements have an identifiable positive or negative influence”.

6.2 Conclusions for the elements of structure

D7 (May et al, 2005) summarises the conclusions for the elements of structure as follows (the text here is slightly modified from the text in Chapter 3):

This presents a summary of the assessment that was made of the degree of influence of the different elements of the decision-making structure on the policy instrument and how this varies by mode. A more complete analysis is available in Chapter 3 of Deliverable 7. Three categories of identifiable influence were used: strong, medium and weak. The classification given to the influence that an element has on any given policy instrument is based on the interpretation of the project team. It is not related to the number of case studies where that influence was seen. For example, the role of international agencies was found to have a strong influence on the management of infrastructure. However, it only applies to the one case study identified and may not be generalisable. By contrast, three case studies identified a medium influence of the degree of centralisation on attitudinal and behavioural measures. Where cells are left blank this is due to a lack of evidence from the case studies rather than necessarily a lack of influence.

The results come from a wide range of case studies but these still represent a sub-set of all implementation scenarios in the EU. We would therefore suggest that each country or local authority would want to apply their own weights to the findings using those proposed as a guide. For each element a condensed description is provided of some of the elements of the analysis where a strong influence was found for the different policy instruments. The interpretation by mode has been built up using the data from the policy instrument assessment (e.g. if the role of the EU had a strong influence on infrastructure provision and regulation for rail then rail would also score a strong influence in the modal assessment). Space constraints preclude a longer summary to which the reader is again referred to Chapter 3 of Deliverable 7. (The case studies are numbered CS1 through to 20 and Deliverable 3 is referred to as D3.)

The role of the EU

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Land use measures</th>
<th>Attitudinal and behavioural measures</th>
<th>Infrastructure provision</th>
<th>Management of the infrastructure</th>
<th>Information provision</th>
<th>Pricing</th>
<th>Regulation</th>
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<td>CS 8, 19</td>
<td>CS 2, 6, 14</td>
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</table>
Infrastructure provision

Through the development of the Trans European Networks and other instruments the EU has a strong influence on the development of major infrastructure projects within the EU but also in Russia (case studies 3, 6 and 19). The presence of the European Commission in infrastructure funding – as identified in the case studies - is twofold:

- European directives and White Papers influence the aims of the infrastructure planning process. The criteria for the selection of certain measures are amended in order to accomplish the EC’s goals. On the other hand, the decision-making processes in national infrastructure planning are re-organised in order to meet these goals. The Community Support Framework is an example for an effective instrument.

- The presence of EU funds helps to facilitate projects, which would not have been possible otherwise. As an example, the concession agreement for the development of the Athens International Airport includes provisions for a significant grant from the European Investment Bank if a sufficient amount of private capital has been secured (case study 19). Nevertheless, the realisation of the ambitious TEN program lacks national processes of priority setting that fully account for the European-wide benefits.

Regulation

The European Union establishes regulations, issues directives, and takes other actions that affect transport markets within and between member states. A prime example is the lead that the EU took in deregulating European airline markets in the 1990s. Open Skies Agreements have eliminated restrictions on the routes that airlines can serve, on the capacities they can provide and the fares they can charge. It is widely held that these changes have benefited travellers.

Despite its direct or indirect influence, the EU is constrained by national policies and sentiments in how quickly it can progress towards meeting its goals. For example, a nationalistic stance towards ports has induced governments to subsidise ports or take other less overt actions to strengthen their competitive positions to the detriment of the common transport market. Bilateral agreements between EU member state governments and the U.S. remain as an impediment to the efficient operation of trans-Atlantic aviation markets.

Finally, the EU faces a difficult task in deciding the scope of its Directives, and in identifying the actions that Member states should take to comply with them. A leading example of this challenge is found in the regulatory reform of railways embodied in EU Directive 91/440 and subsequent legislation. Member states vary widely with respect to how far they have implemented changes, with the UK at one pole of radical rail reform and other countries at the other end where significant liberalisation has yet to occur.

Pricing

The EU affects pricing directly through regulation of certain pricing thresholds (e.g. minimum levels of fuel duty and common standards for HGV pricing), and through its support of marginal social cost pricing (MSCP) as a long-term goal. However, the actual implementation of MSCP is complicated by various practical obstacles; e.g. in the case of ports by the low level of accounting transparency and by difficulties in determining the marginal costs of a port call.

The role of international agencies

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<th>Attitudinal and behavioural measures</th>
<th>Infrastructure provision</th>
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International agencies such as ICAO and IATA in aviation and the International Maritime Organization in marine transport have a strong bearing on the ability of the EU and national administrations to amend regulations, alter pricing structures and manage infrastructure in new ways. This is further complicated by the presence of individual European countries having seats at the negotiating table within these international organisations. In general, where international agencies are involved there is a strong risk that lowest common denominator politics will influence the decision-making process. This is preventing the introduction of policies with potentially substantial welfare gains and leading to policy making within the EU in a sub-optimal environment.

### The role of national government

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National government clearly has an important role to play in setting out policy and providing funding for the whole range of transport policy areas and for all modes. The key findings from the case studies however, concentrate on land-use, provision and management of infrastructure, pricing and regulation.

Case Studies 5, 6, 8 and 14 demonstrate the important role that national government plays in selecting projects to fulfil particular land-use planning objectives. In particular however, Case Studies 5 and 14 showed the need for national government intervention to ensure that local and regional competition does not lead to the over provision of transport infrastructure at the expense of the environment.

Case Studies 3, 6, 7, 8, 14 and 16 to 20 all highlighted the key role that national government has as a prime, co-funder or concessionaire manager for all new major infrastructure. It is self-evident that national governments should have a strong role in the criteria for approving, selection and monitoring of major new infrastructure. The presence of a clear and transparent process was seen to be of great importance to lower tiers of government and interest groups (e.g. case study 19).
The importance of national intervention or at least monitoring of infrastructure management was highlighted through several case studies. Case Studies 3 and 4 showed how national governments are involved in the proposing and setting of charges to manage infrastructure (see pricing for further discussion). Case Study 9 in particular shows how the absence of a strong national incentive to undertake more efficient routine maintenance of Federal trunk roads in Germany was a significant factor in sub-optimal maintenance in some regions.

With pricing, several case studies demonstrated that national governments need to provide a clear framework of principles on which pricing for infrastructure use can be charged. In the absence of such a framework there is the potential for monopoly rents to be levied and for those subject to the pricing schemes to appeal against the charges on equity grounds.

In regulation, there is a clear and strong rationale for national governments to intervene in matters of safety and environmental regulation and for the provision of socially necessary services for example (demonstrated through the provisions made by national governments with respect to regulation of the airline, maritime and rail industries in case studies 13 to 18).

National governments also have a mandate to support harmonisation of environmental, tax and other policies across the EU. The evidence indicates that their track record is quite mixed. On the one hand, Case Study 15 found that the strong and centralised national decision-making system in France is generally favourable towards EU regulations and protocols. For example, the national government has set a goal of shifting freight traffic from road to rail in order to meet environmental objectives. The statements and commitments to these policy objectives are not however always supported by effective regulation as discussed below.

Partial implementation of the EC Directive 91/440 on rail has led to varying degrees of liberalisation which have different degrees of impact on efficiency and ability to deliver the policy objectives discussed above (Case Studies 15-17). In France, infrastructure management and operations have only been partially disintegrated and the national government itself acts as regulator. To date, SNCF remains the only operator of rail services. Case Study 15 concluded that the system of financial flows and contractual relationships between SNCF and the infrastructure manager, RFF, has not been conducive either to efficient usage of the infrastructure or to opening up the rail services market to competition. Indeed, the State is excessively prone to interfere with access prices and financial transfers. Germany has progressed even less than in France since the government has retained a dual role as owner and regulator of DB AG. In contrast to France and Germany, regulatory reform of the rail sector was carried out sooner and far more comprehensively in the UK. It also featured an independent regulator model that, Case Study 17 concluded, performed relatively well under the circumstances and was an essential element of the model.

The degree of centralisation

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<td>Regulation</td>
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The case studies within workpackage 5 (5 to 12) addressed the impacts of the degree of decentralisation/centralisation on the decision-making process. The hypotheses and results (in brackets) were that:

Strengths of decentralised systems are:
- Identifying local/regional preferences (confirmed)
- Generating information (partly confirmed),
- Flexibility of policy implementation (identification and implementation of institutional change in the face of new transport policy requirements) (mainly confirmed)
- Participation of individuals (partly confirmed)
- Higher transparency of decision-making processes (unconfirmed)

Strengths of centralised systems are:
- Professionalism of public decision makers (partly confirmed)
- Co-ordination of diverging local/regional interests (mainly confirmed)
- Higher variety of instruments (confirmed)
- Reduction of transaction costs of the policy making process (not confirmed)
- Consolidation of information (confirmed)
- Higher speed of policy implementation (not confirmed)
- Higher transparency of decision-making processes. (uncertain)

Further details of how these decisions were arrived at can be found in Deliverable 5.

**Influences from other tiers of government**

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Case study 5, supported by case study 7, found that land-use measures were affected as travel to work areas no longer correspond to administrative boundaries that were devised some time back. The boundaries appear more relevant for a number of non-transport public services. Regional government therefore has a potentially strong role to play in co-ordinating infrastructure investment across boundaries and ensuring coherence of networks. However, whilst the potential influence is strong the practice is that there are weak powers of regional co-ordination for the most part with much simply being done at a strategic rather than a practical level.
Influences from adjacent authorities

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The actions of adjacent authorities have a very strong impact on pricing decisions of the authority in question. This is true of regional rail pricing in France (case study 16) and for local charging in the Netherlands (case study 11) and the UK (case study 5). The need to coordinate pricing strategies across adjacent local areas creates an institutional tension that requires management effort to resolve (e.g. to achieve a coherent area-wide parking policy). In Edinburgh (case study 5), the failure of the City of Edinburgh Council to address the concerns of adjacent authorities caused delays and objections to the scheme, although these were not the causes of its ultimate rejection.

Institutional consolidation

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</table>

Institutional consolidation refers to the maturity and stability of the institutions established to plan and deliver transport policy. It is not surprising therefore that the new EU member states and Russia suffer from less well established institutional structures as they move from a command and control to a market oriented approach to government. This was found to impact adversely on the introduction of pricing measures and also on public-private sector concession projects in the case studies examined.
The role of private sector

<table>
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<th>Instrument</th>
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<tr>
<th>Mode</th>
<th>Air</th>
<th>Rail</th>
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<th>Local Transport</th>
<th>Cycle/Walk</th>
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</table>

The interface between the public and private sector in transport provision provides for clashes of objectives and is a layer of significant institutional relationships that require careful understanding.

The private sector is increasingly involved in the financing of a range of transport infrastructure (case studies 3, 6, 19, 20). The involvement of the private sector was generally seen to be favourable to the process of developing an efficient and well targeted infrastructure project. The extent to which this is preferable to traditional public sector procurement depends on a number of factors including the degree to which adequate monitoring exists in the public sector, the ability of the public sector to act as an informed client and the selection of the right form of PPP and concession. It is argued that the introduction of PPPs requires the true risks of projects to be brought out in the open.

**Rail transport**
Free-market prices have yet to be established in the European rail industry, and considerable differences are apparent between Member States in terms of the freedom of operators to set prices as they see fit (case studies 16-18). Key issues are the underlying cost structure faced by the rail operators and regulation of some aspects of the fare system.

In the UK, the right to run passenger train services was franchised to private-sector train operating companies (TOCs). This created ‘competition for the market’ whereby franchises were awarded to firms with the lowest bids for subsidy. However, fares are regulated according to the franchise agreements (case study 18). Control over access to the rail infrastructure was granted to a monopoly (initially Railtrack) with regulations governing access charges. Case study 18 concluded that the UK model of privatisation cum pricing regulation of both rail infrastructure and operations should not be rejected as unworkable, but rather that elements of the design and implementation need to be revised. By comparison with the UK, the French and German rail markets have been liberalised to a much lesser extent. Nevertheless, access pricing has proven to be a contentious issue in these countries as well.

**Road transport**
For decades interurban toll highways in Europe have been built and operated by private enterprise. Since practical alternative routes often do not exist, such highways resemble natural monopolies and price regulations are the norm. Yet while the concept of tolled motorways is familiar, controversy over the level of tolls still arises. Case study 20 recounts experience with a private tolled motorway in Hungary – an accession country with limited experience of market institutions. The private concessionaire initially introduced high toll
rates that led to public protests and forced the government to renegotiate the terms. Extended discounts were given (and the operator reimbursed by the government) with the dual aim of improving acceptability and avoiding diversion onto parallel routes. Ultimately the toll was replaced by a vignette system despite a review concluding that prices were not in excess of those agreed during the development of the project. From the perspective of marginal-cost pricing the shift from variable to fixed charges would seem to be a step backwards. (This cannot be stated definitively since marginal social costs were not investigated.)

Further observations were drawn from the case studies in Deliverable 6 (case studies 13-20) regarding transport market regulations. Whilst the case studies demonstrated potential benefits from deregulation, and the need for further (albeit selective) liberalisation they also highlighted the overriding need for well-designed regulations, and diligent implementation of them. An especially germane example of this is the regulatory reforms of rail services in the UK. The reforms entailed vertical separation of infrastructure management from train operations, and a dominant role for the private sector in both functions. For a period after its inception, the model appeared to work well, but serious performance and financial problems eventually developed. Case study 18 concluded that the difficulties arose in large part due to “bad implementation” rather than fundamental design flaws, but the study makes clear that both elements are crucial for success.

Regulations require enforcement, and in circumstances where a stable relationship becomes established between the regulator and the regulated, a danger of regulatory capture exists. Evidence from case studies 14 and 18 suggests that there are examples of where this has not proven a negative influence. However, as noted in case study 13, flagship airlines in particular are fierce guardians of the status quo in airport regulation as they have dominant market positions at major airports.

### The degree of regulatory intervention

<table>
<thead>
<tr>
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<td>D3, CS 16</td>
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</table>

Several case studies demonstrate how the scale and quality of infrastructure investments depend on the regulatory regime. Case study 19 describes Greek experience with a switch from wholly public financing and construction of projects to Public Private Partnerships (PPPs). Two large-scale transport projects have been successfully completed with partial private-sector funding, as well as timely and cost-effective delivery, without sacrificing safety, environmental or service quality standards. The Greek State has overall control of projects as far as the terms under which a PPP is structured. The process includes a call for tenders, evaluation and selection of the consortia, and evaluation of the selected concessionaire’s activities to ensure that projects are completed according to the agreed time schedule and technical specifications.

Regulations concerning infrastructure investments are passed not only by national governments but also the EU through its directives relating to nature conservation, government subsidies and competition. Case study 14 describes how a major investment
project at Rotterdam port included an environmental impact assessment and an agreement to balance economic development and quality of life in the region. The case study also describes how EU regulations can be subverted if national authorities subsidise ports in an attempt to strengthen their competitive position.

As would be expected the degree of regulatory intervention has a strong impact on prices. Where cabotage restrictions were lifted in the EU and a common aviation area established there has been a significant reduction in real terms in air fares. However, regulatory restrictions on airport charges are also distorting landing fees (case study 13). It is inevitable with natural monopolies that there will be intervention in regulation and pricing to some degree. In the UK rail market where a relatively 'light touch' approach (compared to other EU countries) was put in place to regulation, the position has retrenched somewhat, indicative of the need for clear objectives and a clear mandate for regulatory intervention.

### Coordination across modes

<table>
<thead>
<tr>
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The degree of co-ordination across modes has a strong influence on the provision and management of infrastructure. The degree to which investment in integrated transport facilities such as interchanges is worthwhile depends on co-operation and co-ordination of service providers. The evidence from the case studies across the board but particularly those examining government structures and industry characteristics is that there is a uni-modal or 'bunker' mentality to planning and delivery of transport services. This is to some extent fuelled by modal structures of governance and separate budget headings, objectives and targets for each mode. Even where government reorganisation attempts to counter this as in the UK, the industry organises and aligns itself most effectively by mode and this reinforces the institutional split. Whilst some co-ordinating actions are in the interest of private sector providers many are not and it is difficult to conceive of a powerful integrationist industry lobby group. This however is not the case with environmental lobby groups that rally around a co-ordinated approach.

### The social environment

<table>
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<tr>
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</table>
The social environment is a new element identified within TIPP. It appears to have a moderate influence across a range of policy tools and works in different ways. The social environment of the key actors is an important factor influencing their opinions and subsequent decisions. The social environment includes other people such as colleagues, friends or family, to whom the actor feels belonging to and whose opinion are of significant importance to him/her. For example, for politicians their respective party and its members are such important people. Or in the case of the media certainly the customers, but also the opinion of other journalists can be significant.

The acceptability of pricing measures, for example, appears to be dependent on the social environment. Indeed, the social environment is strongly linked to problem perception and perceived effectiveness of solutions. For example in case study 1 the problems of the old DB (Deutsche Bahn) fare system were not evident enough for most passengers of the DB and not part of public or private debates (no problem perception as basis of acceptability). Most passengers, perceived other unsolved problems, like delays, as more urgent. This impression of many people was certainly increased also through experiences of their social environment, because many had this viewpoint, even if they did not travel with DB for a long time.

6.3 Conclusions for the elements of process

D7 (May et al, 2005) summarises the conclusions for the elements of structure as process (the text here is slightly modified from the text in Chapter 3):

This section reviews the importance of the decision-making process elements according to the range of policy instruments identified. The same categorisation process was applied to this typology and the same caveats exist as discussed in Section 6.2.1.

Setting and quantifying objectives, goals and targets

<table>
<thead>
<tr>
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</table>

Objectives were shown to have a strong impact on how infrastructure is managed. In case studies 7, 9 and 10 this influence was largely negative. The unimodal approach to governmental transport structures in Finland for example is not thought to lead to a balanced infrastructure management plan. The system of road maintenance in Germany appears to lack sufficient incentives for regional maintenance to be more efficient and the split of regional rail investment in Belgium appears to be largely politically rather than objectively motivated. By contrast, the objective of congestion reduction (a pricing measure) was central to London introducing a congestion charging scheme.

In regulation, responsibilities and objectives must be clearly identified if regulators are to carry out their mandates effectively. Clarity of regulations is also essential if transport service providers and other actors are to understand the rules of the game. Some examples of well-formulated regulations were described in the case studies, such as those governing the award of PPP concessions in Greece (CS 19). Other case studies reviewed instances of seriously flawed regulations. Perhaps the most notable of these are the regulations governing rail regulatory reform in CS 16-18.
Problem identification and perception

<table>
<thead>
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Problem perception, as would be expected, has an impact across the range of measures considered and a particularly strong impact on infrastructure provision, pricing and regulation. Problem perception covers issues such as comparative inefficiency and geographical marginalisation (which can drive infrastructure development) or can work in the other direction where issues (such as cycling investment) are ignored. As pricing measures can be highly contentious, the existence of a clearly defined problem is an essential precursor to action. The existence, identification and acceptance of market failure are essential to the development of regulation. For example, in the case of inter-regional and international rail traffic, fare, track maintenance and other management decisions that are made in one region or state affect revenues and service quality in other regions or countries (Case study 15).

Identification of instruments and strategies

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<tr>
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</table>

This element was not well covered by the case studies although the selection of instruments and strategies has a significant impact on regulation. Decisions on how to open up competition in the air, maritime and rail markets have had a strong impact on the sorts of regulation developed (case studies 13, 14, 16, 17 and 18).

Appraisal of alternatives

<table>
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Appraisal has a strong but not always positive influence on infrastructure provision. Strong appraisal was felt to be highly beneficial to the selection and prioritisation of new Greek road schemes (case study 6 and 19). However, a uni-modal approach to transport planning in
Finland was felt to restrict true trade-offs between investments in different modes (D3 and case study 7). This is repeated to some extent in the UK.

Appraisal features strongly in regulation where regulators are required to understand existing cost and incentive structures and to assess the impacts of alternative regulatory actions. However, it appears that regulatory actions are not always consistent with actions that would be supported by full transport appraisal techniques. Regulation is also still used to protect or has been unable to resolve issues relating to dominant market positions (case studies 8, 13, 16 and 17) which is not leading to the best outcomes that would be achieved through a transparent appraisal.

**Decision-making under uncertainty**

<table>
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Uncertainty can affect the costs and therefore viability of new infrastructure. It is clearly a bigger factor on very large and complex infrastructure projects. However, the existence of uncertainty is well understood and not a wholly negative factor. Case study 6 showed how this helped to improve the planning and management of bids for new infrastructure, leaving the Greek government less exposed to risk of overruns. The existence of risk is made more transparent when it is explicitly stated who bears the risk and at what price.

Still, problems can emerge even when the apportionment of risks appears to be complete. In the case of motorway project M5 in Hungary (case study 20) risk allocation and risk-control methods were established to cover a wide range of risks (political, construction, operation and maintenance, commercial, financial and legal) and yet the project still ran afoul of public protests.

Uncertainty can also have a very significant and usually negative impact on regulatory regimes. By their nature, such regimes are only robust to the foreseen range of operating conditions within which they are expected to operate. Any change in regulations requires full consultation and appraisal, and response is typically slow. D3 and case studies 13 and 18 highlight where this becomes a problem. Case study 18 showed how unexpectedly poor infrastructure network conditions combined with higher than anticipated levels of network traffic ultimately contributed to a collapse in network performance because of excessive wear and tear and insufficient maintenance. The regulatory regime had not been established with sufficient incentives for the remuneration of maintenance. Uncertainty and ‘bounded rationality’ – the ability to predict only reasonably foreseeable events can have significant impacts on regulation.
The findings in this section are strongly linked to those of problem perception and identification. The perceived effectiveness (or lack of) is of fundamental importance to the public acceptability of pricing interventions for example. Whilst in the case of HGV charging (case study 2) in Germany, the hauliers perceive that this will be effective in preventing unfair competition and in providing some efficiency gains, the general public did not perceive the Deutsche Bahn fare changes (case study 1) or the proposed charging schemes in the Netherlands (case study 4) as effective. Indeed, in both cases there was a degree of opinion that other measures, particularly infrastructure improvements would be more effective solutions.

In the case of the Deutsche Bahn and Dutch road pricing case studies (case studies 1 and 4) interest groups and the media focused strongly on the equity impacts of the policies. The inability of the proposers to win back the argument was a significant factor in the ultimate failure of both policies, one after implementation. Equity concerns were raised regarding the London congestion charge. However, the Mayor of London accepted in public that there were some losers but pointed out the winners in the form of better travel conditions and improved public transport. In the case of motorway M5 in Hungary (case study 20), the objections of local users to high tolls and heavy diversion of traffic to parallel untolled routes forced the government into renegotiating the initial agreement on tolls with the concessionaire.

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**Implementation planning and process**

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</table>
As would be expected, implementation planning and process has a medium or strong impact on all policy instruments. The strongest impacts are for infrastructure provision, pricing and regulation. In general, the more comprehensive, integrated and complete the implementation planning and process, the more successful the subsequent introduction is likely to be.

There was an interesting contrast between the processes surrounding the implementation of the Hungarian privately financed motorway (case study 3) and the Greek planning process for CSF roads (case study 6). A well developed and clear process within the Greek system has led to the successful implementation of a stream of projects. However, the Hungarian motorway was subject to legal challenge shortly after its introduction. It appears that insufficient attention had been given to regulatory aspects of the process at an early stage. This in turn relates to the issue of institutional consolidation considered above (section 3.1.7).

With changes to prices, it appears easy to misjudge the implementation strategy for a new charging system. A poor public relations campaign and a breakdown in communication between Deutsche Bahn and its stakeholder groups contributed to an ill-received implementation of the pricing reform scheme for German rail services (case study 1). However, the German HGV toll (case study 2) also failed at the implementation stage due to technological problems but has not been abandoned due to on-going support from all stakeholders. Success in London (case study 5) and Norway suggests that the provision of a clear failure exit strategy (i.e. if this is unsuccessful in meeting the objectives, unworkable or unpopular it will be removed by a certain date) can assist in diffusing arguments about implementation.

The nature of the regulation has a greater influence on the implementation and planning process than vice-versa. For example, local regulation of parking policies (case study 11) leads to a different implementation process than does national regulation. International regulatory issues interfere with the extent to which changes to aviation regulation can be introduced. The case study of UK rail regulation also highlights how the regulatory structure can influence the availability of funds and the need to invest in infrastructure which in turn impact on implementation planning and process.

**Monitoring, feedback and evaluation**

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Land use measures</th>
<th>Attitudinal and behavioural measures</th>
<th>Infrastructure provision</th>
<th>Management of the infrastructure</th>
<th>Information provision</th>
<th>Pricing</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence</td>
<td>Strong</td>
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<td>Strong</td>
<td>Strong</td>
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<tr>
<td>Evidence</td>
<td>CS 3, 6, 19</td>
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<td></td>
<td>CS 3, 5</td>
<td>CS 18</td>
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Monitoring feedback and evaluation has a strong impact on infrastructure implementation and on pricing. It is also an important feature of regulation. In general the existence of monitoring and feedback loops has a positive effect on performance allowing clearly justified management action to be taken to rectify difficulties.

**Cross-cutting elements**

Five elements that cut across the whole decision-making process were identified as being important.

*Knowledge management and the use of information*

The use of information by all parties should have an important influence on all policy instruments at various stages during the process from problem identification through to implementation and perceived effectiveness. Information can be used to support (case study 13) or lobby against (case study 3) a particular policy or position. The provision of
information to the public in an easily understandable format is essential to the introduction of controversial policies. Lobby groups and the media are particularly adept at this. A number of studies (case studies 13-18) pointed to a lack of information as a barrier to effective policy formulation and implementation.

**Participation and consultation**

Participation and consultation also has an important impact across several stages in the policy process. The presence of good participation and consultation procedures assisted in the expansion of Rotterdam port and in finding a solution to allow opening of the Greek coastal passenger shipping markets. By contrast a breakdown in consultation with the Deutsche Bahn fares reform certainly did not aid the introduction of the policy.

**Conflict resolution**

The presence of a forum or process for conflict resolution is a supportive measure to the introduction of any contentious policy. Even within measures such as information provision it is likely that operators will hold information in different formats and have different preferences. Interest groups offer a route to resolve and discuss such issues but the case studies also highlighted instances where a more formal process such as the legal system (case study 3) was required.

**The involvement of interest groups**

Interest groups were shown to have an impact on the decision-making process. This manifested itself in both a supportive (e.g. case studies 2 and 14) and obstructive manner (e.g. case studies 1, 3, 4 and 13). Great emphasis needs to be placed on understanding and engaging with stakeholder groups at an early stage in the process. This of itself will not prevent conflict but will assist in the management of it.

**The involvement of the media**

It was not possible even within those studies which focused on the role of the media to attribute the ultimate success or failure of any projects to media influence. However, it is clear that the media aligns itself alongside stories with strong public interest and provides more sustained and comprehensive coverage on issues relating to fairness and equity than those that relate to industry impacts for example. Where media relations are not well managed, this poses a significant risk to acceptance of project ideas and implementation.

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6.4 **Annex to Chapter 6: An alternative structuring for the conclusions**

As described in Sections 6.1, 6.2 and 6.3 above, the TIPP conclusions have been structured and categorised by the elements of structure and process, 11+9+5 in total. It of course useful to ask whether there would have been alternative ways of structuring the conclusions; in order to place the original analysis against a broader background and also otherwise. A fuller treatment of this question is provided in Chapter 8 below. This Section 6.4 shortly illustrates a distinction between ‘generic’ and ‘specific’ conclusions and how it might be implemented for the TIPP conclusions.

Distinguishing between different types of results according to their generality or specificity would introduce another dimension into the analysis that might help in effective communication of the results to policymakers, the research community, the media, and the public at large. Evidently this kind of distinction between different types of result, and introduction of the corresponding hierarchy of results, can be done
in many ways. The following categorisation or setting would appear to be a sensible compromise such that it would in a balanced and comprehensive way allow the different types of result that have been produced within the TIPP case studies:

**Generic results:**
1. Related to decision-making and implementation structures: optimal choice between different organizational structures and optimal allocation of decision-making powers and functions between organizations and actors (Category 1)
2. Related to decision-making and implementation processes: optimal design and efficient management of policy implementation processes (Category 2)

**Specific results:**
3. Related to particular policy areas and instruments: efficient and effective implementation of particular policies and instruments (Category 3).

The following setting shows a more detailed classification of results (conclusions, recommendations) within the three categories considered:

**Category 1:** Results related to the choice between different organisational structures and allocation of decision-making powers and functions between organisations and actors such as between:
- Centralised and decentralised institutional structures
- Different levels of government (vertically) and across modes and sectors (horizontally)
- Public and private sector

**Category 2:** Results related to the design and management of practical policy implementation processes such as:
- Choice of policy objectives, goals and targets
- Choice of policy strategy and implementation path
- Communication, consultation and participation
- Conflict prevention/resolution
- Monitoring, evaluation and feedback

**Category 3:** Results related to the implementation of particular policies and instruments such as:
- Regulation and pricing (for infrastructure use)
- Provision for infrastructure
- Provision for public transport services
- Promotion of inter-modal transport and integrated approach to transport and land use

The generic results in Categories 1 and 2 are related to the development of decision-making and policy implementation systems in general; as indicated, they equally apply to all kinds of policy/instrument and policy area. Category 3 for the specific results includes those results related to the implementation of particular policy areas / policies / instruments (at the EU level and otherwise). Although Categories 1 and 2 in this setting represent results related to ‘structure’ and ‘process’ i.e. the key categories in D7 (May et al, 2005), there however are four important differences.

First, the ‘structure’ and ‘process’ categories (Categories 1 and 2) now represent (by definition or assumption) results that are generic in the sense that they equally apply to all main policy areas and instruments. By contrast, in D7 the question how strongly
each of the 11+9+5 elements of structure and process interacts with or influences the different policy instruments is considered as a major/main issue. This reflects the fact that the different elements of the structure and process categories in D7 contain both generic and specific (as defined above) types of result mixed. Second, whilst this classification highlights a dichotomy between results presented at two different levels (Categories 1 and 2 applying to all main policy areas / instruments, and Category 3 applying to particular policy areas / instruments only), D7 present all the results in this respect at the same level (i.e. mixed, as stated above). Third, whilst the introduction of Category 3 here highlights the need to be explicit and transparent in regard to the links to particular policy areas / actual policies implemented in practice, in D7 by contrast, the links to policy areas and actual policies are not particularly highlighted (are left implicit). Similarly, whilst the present approach (through the hierarchy of results) helps to distinguish between the most important (main) results and less important (secondary) results, D7 leaves also this distinction to the reader to make. Fourth, the classification of individual elements within the structure and process categories here differs from that of D7 as far as individual elements and is also less detailed (and hence easier to comprehend).
7 POLICY RECOMMENDATIONS (D7)

The final stage of the TIPP project has been to draw policy recommendations based on the empirical results of the previous analyses. Naturally, it is practical to organise the recommendations in accordance to the way the main empirical results are arrayed. However, while doing this, it is important to be as explicit as possible in showing the link between the results and the actual recommendations i.e. how the recommendations are actually derived and achieved.

D7 (May et al, 2005) arrayed the policy recommendations in accordance with the way it classified the empirical results, into two main categories as follows:

1. Recommendations related to decision-making structures
2. Recommendations related to decision-making processes

As explained in Chapter 6, D7 identified 11+9+5 elements of structure and process to represent the main results and conclusions of the project. Consequently it also introduced these same 11+9+5 categories for the recommendations. This way of presenting the policy recommendations is consistent with, or a result of, the analytical framework, that the project had assumed. In addition to the fact that this was agreed as part of the analytical framework, D7 offers also another justification for presenting the recommendations as classified according to the “elements of structure and process” and their sub-categories:

“...it will permit the readers interested in a particular aspect of structure or process to identify the recommendation of particular relevance to them”. (p. 124)

This quote can also be seen as motivating and justifying the particular approach that D7 and the TIPP project have adopted for organising the project’s main results, and ultimately motivating and justifying the analytical framework that the project had assumed: the purpose is to serve the readers in the way they would like to see the results and recommendations be presented to them.

Section 7.1 explains the way the recommendations were achieved (the evidence trail). Section 7.2 presents the recommendations for the elements of structure (9 elements), and Section 7.3 for the elements of process (11+5 elements). Section 7.4 is Annex to this Chapter 7 and it presents two tables (Synthesis Tables A and B) where the information of the 11+9+5 unnumbered tables in Chapter 6 above is shown in a summary form. 23

7.1 The evidence trail to the recommendations

D7 (May et al, 2005) writes (Chapter 4):

23 Sections 7.1, 7.2 and 7.3 are extracted from D7 (May et al, 2005), Section 7.1 from Chapter 4 and Section 7.3 from the Executive Summary.
In this final section, we focus on the recommendations to be drawn from the results of the case studies in WPs 4, 5 and 6, and from earlier analysis in WP 3. The approach adopted to formulating recommendations is described in Deliverable 2 [May et al, 2004] Section 5. We have focused our recommendations on the two dimensions from Deliverable 2 which relate directly to decision-making:

- decision-making structures; and
- decision-making processes.

For each of these, an initial list of elements was developed in WP2. These lists were then reviewed and expanded to cover additional issues identified in WPs 3, 4, 5 and 6. The finally agreed lists are set out in [Section 6.1] above, and form the structure for the remainder of this section. While this approach results in some repetition of issues, we have retained it, since it will permit the reader interested in a particular aspect of structure or process to identify the recommendations of particular relevance to them.

The formal process for developing recommendations, as described in Deliverable 2 Section 5, is one of specifying hypotheses, testing them through the national surveys in WP3 and series of case studies in WPs 4, 5 and 6, drawing conclusions, and producing recommendations based on those conclusions. While this process is logical, it is important to stress the limitations of the results available. While the project investigated a number of generic hypotheses, based on the elements considered below, individual case studies retained the freedom to test additional hypotheses. Inevitably, these could not be tested more widely. Even for the generic hypotheses, we typically only have between four and six case studies to which a given set of hypotheses could be applied, and those case studies by design vary substantially in their focus and context. Moreover, the evidence obtained in the case studies is predominantly qualitative and descriptive rather than quantitative and analytical. It has therefore not been possible to test our hypotheses in a strict scientific manner. As a result, the conclusions drawn in Section [6] above have been qualified by providing an indication of their strength and applicability.

The recommendations set out below are therefore similarly provisional, and some can be stated with greater certainty, and wider applicability, than others. We have indicated the case studies on which they are based, and have also identified those which are drawn in part from Deliverable 3. This provides an indication of the strength of each recommendation. Those recommendations which appear to be stronger and, in particular, those recommendations which suggest a substantial change from current practice will merit further investigation using a wider set of focused case studies and with a greater reliance on quantitative information.

Whilst the data collection and synthesis presented in Chapters 1 to 3 [of D7] was based on a positivist approach, recommendations are, by their very nature, driven by normative considerations. The recommendations are not driven by one common normative paradigm. Indeed, they are drawn out based on the participants experience and observation of the current state of implementation, the perceived and reported problems of the project team and participants respectively. They are, therefore, a reasoned conclusion about what approaches are successful and how more difficult measures could be better implemented. We place significant importance on the fact that these are evidential based recommendations (accepting the limitations discussed above). The evidence trail that brings us to the recommendations is clearly identified and transparent and retains the positivist approach up to this point.
7.2 Recommendations for the elements of structure

D7 (May et al, 2005) summarise the policy recommendations for the elements of structure as follows:

The role of the EU

- The European Union has a key role in the specification of common approaches to pricing and in determining Europe-wide regulations for competition policy, safety and the environment. This role should be maintained and if necessary enhanced by ensuring that all national governments implement the agreed schemes and regulations (CS 13, 14, 16, 17).
- The European Union also has an important role in specifying and financing international infrastructure projects, and in supporting projects at a regional level. While such support is welcome, care is needed to avoid such infrastructure being provided in ways which are inconsistent with regional and national transport strategies (CS 3, 6, 14, 15, 19, 20).
- Concerns over subsidiarity should not be used to discourage EU involvement in regional and local transport policy. The European Union has an important role to play in encouraging consistent actions among member states and, through them, at a regional and local level. For example, the EU should endeavour to counter the tendency of member states to subsidise ports and airports. The EU is also able to disseminate good practice by comparing performance in different member states (CS 13, 14; D3).
- The European Union was instrumental in deregulating European airline markets in the 1990s. However, bilateral agreements between EU member state governments and the US remain as an impediment to the efficient operation of transatlantic markets. These agreements should be replaced with a Common Atlantic Aviation Area. Establishing such an Area would require a multilateral effort in which the EU should play a key role (CS 13).
- Some aspects of regulation such as the opening up of rail markets are subject to wide variation of interpretation between member states. It will be important to monitor the effects of different approaches, and to tighten the specification of the regulatory structure in the light of evidence on good and less good practice. The varied experience in the UK, France and Germany raises the possibility that the EU should demand specific accompanying measures to promote competition (CS 16, 17, 18).

The role of other international agencies

- There is a tension between the roles of the European Union and international agencies, particularly when national governments have direct membership of such agencies. The presence of international agencies can lead to lowest common denominator policies, particularly in the aviation and maritime fields; slot allocation and pricing and the treatment of aviation fuel duty are examples. More attention needs to be given to ways in which the EU can negotiate with such agencies to achieve higher standards in the interests of the environment, safety and efficiency. For example, the EU could work with the European Court of Justice to establish a Common Atlantic Aviation Area (CS 13, 14; D3).

The role of national government

- Within the context of EU policies, national governments should take the principal responsibility for specifying regulations for safety and the environment, for the
regulation of national services and for the basis of competition policy. They should also specify the basis of national pricing policies for public transport and monitor performance of regional and local authorities in terms of these regulations (CS 5, 7, 15, 16; D3).

- In addition they will naturally be responsible for national infrastructure, such as high speed intermodal and rail services and international transport corridors, where the size and inter-regional character of the projects dictate that they be directed at the national government level (CS 9, 10, 15, 16, 17, 18).

- National governments have a key role in providing effective institutional structures at national, regional and local levels, in facilitating an integrated approach to transport and land use policy, in providing an appropriate legislative and regulatory framework, in developing consistent approaches to financing, appraisal, monitoring and benchmarking in encouraging innovation and in supporting enhancement of skills, research and development (CS 5, 7, 8, 9).

- While there may be a case for changing institutional structures in order to improve them, it is important to bear in mind that such changes can cause disruption and lack of focus for a period of two to three years. Such costs need to be assessed carefully against the benefits of change (CS5).

The degree of centralisation

- Centralised structures are more conducive to the coordination of diverging local interests, the use of a wider range of instruments, the consolidation of information and, potentially, a professional approach among public decision-makers. Where a decentralised approach is to be adopted, particular emphasis will be needed on these attributes. The higher tier body will need to ensure that lower tier bodies adopt consistent approaches to regulation and pricing, and to monitor their performance (CS 5, 6, 7, 9, 11, 20; D3).

- Conversely, decentralised structures are better able to identify local preferences and to adopt a flexible approach to implementation. There is some evidence, for example from Public Private Partnerships, that they also facilitate generation of information and participation of individuals. Where a centralised approach is taken, care needs to be taken to provide for these requirements (CS 19, 20; D3).

- To improve the efficiency of co-ordination, there is a case for the higher tier authority specifying objectives which the lower tier authorities should pursue, but some flexibility should be retained for lower tier authorities to pursue additional objectives where they wish to do so. This approach is necessary when there is a clear tendency for decentralised decision-making to result in a “race to the bottom” (CS 5, 7).

- Where governments decentralise decision-making to regional and local government, they need to ensure that appropriate levels of funding and know-how are also devolved, or to provide effective revenue raising powers. This will have a particular impact on infrastructure provision and maintenance policies and the support of public transport services (CS 5, 7, 11).

- Centralised structures are preferable for planning, financing, executing and maintaining long distance infrastructure investments, such as national and international corridors, for which the benefits and costs have a strong inter-regional component, and comprehensive information is required for sound decision-making (CS 6, 9, 15, 16, 17, 18 19).

- There is conflicting evidence on whether decentralisation in the form of vertical separation of infrastructure management from service operations is advisable in
network industries. This is an issue on which further evidence is needed before the EU can advise on a preferred approach (CS 15, 16, 17, 18).

Influence from other tiers of government

[Note that the recommendations on centralisation apply here also]

- Regional governments should have responsibility for regional infrastructure and the regulation and pricing of regional transport services. Where appropriate they should be given the flexibility to pursue more demanding environmental and safety standards than those imposed at a national level (CS 5, 7, 11, 15, 17; D3).

- Local authority boundaries are often inconsistent with travel to work areas. The adjustment of jurisdictions’ boundaries and the establishment of special purpose entities can help to internalise spill-over effects. A single authority responsible for a conurbation and its travel to work area, with lower tier authorities responsible for detailed implementation, should be introduced in preference to distributing responsibility among potentially competing single tier authorities (CS 5, 7, 11, 16).

Influence from adjacent authorities

[Note that the recommendations on centralisation and other tiers of government apply here also]

- At a national and regional level, competition can lead to over-investment in ports and airports. The European Union and national governments, as appropriate, need to ensure that such investment is focused where it is most beneficial (CS 13, 14).

- There is some evidence that splitting responsibilities between smaller local authorities will induce them to focus on economic development to the detriment of the environment and sustainability. Particular care is needed to ensure consistency between neighbouring authorities in infrastructure provision, demand management, regulation and pricing. Regional or conurbation governments should be charged with achieving an appropriate balance between consistency and competition (CS 5, 7, 8, 11; D3).

Institutional consolidation

- Institutional consolidation refers to the maturity and stability of the institutions established to plan and deliver transport policy. It is not surprising that the new member states and CIS countries suffer from less well established institutional structures as they move from a command and control regime to a market-oriented approach. Support may be needed to assist such countries to achieve stable structures, and the opportunity should be taken to develop such structures to reflect the good practice reflected by our other recommendations (CS 3, 8).

The role of the private sector

- The interface between the public and private sector in transport provision introduces the potential for conflict as a result of their very different objectives. Care is needed to ensure that the private sector is involved in ways which ensure that their decisions align with public policy objectives. This can provide a justification for regulation in fields such as land use and pricing (CS 5, 11; D3).

- The private sector can offer particular benefits in the financing and procurement of new infrastructure, but it will be important to ensure that such infrastructure is commissioned and designed in ways which satisfy public policy objectives (CS 3, 6, 19; D3).
• An important element of private sector involvement in investment and service operation is the sharing of risks between private and public sector. As a rule, commercial risks should be borne by the private sector, while public policy risks are borne by the responsible public bodies. The state may aid in the acquisition of loans from commercial banks by acting as guarantor (D3, CS 19, 20).

• Private sector involvement in the operation of public transport can achieve greater efficiency of operation and more innovative services. Franchising is an appropriate way to introduce competition for the provision of passenger services, provided a number of conditions are met. For bus services these include the existence of an appropriate authority to specify fares and service levels. For rail services they include the existence of a government body responsible for specifying conditions of the franchise, allocating subsidy levels and undertaking strategic planning, and an independent regulator responsible for overseeing the decisions of the infrastructure manager regarding track access charges, track maintenance and timetable allocation. (CS 5, 15, 16, 17, 18).

• A greater understanding is needed of the effectiveness of different types of contract with the private sector. As a generality, such contracts need to stipulate the provision of sufficient operational data to allow the private sector body to carry out its responsibilities effectively and also to allow its performance to be monitored by the regulator in charge (CS 16, 17, 18; D3).

The degree of regulatory intervention
[Note that the recommendations under European Union, international agencies and national government above are relevant here also]

• In specifying the regulatory framework, it is important to avoid structures which are unduly authoritarian and which create unnecessary distortions in the free operation of the transport market. To this end, a monitoring committee should be established to ensure that sound competition is achieved. The national telecommunications agencies which operate in many countries offer a model (CS 15; D3).

• State intervention may be advantageous in the provision and operation of privately financed infrastructure projects. This will particularly be the case where, as in the accession countries, there is a lack of market experience or a paucity of information (CS 19, 20).

• Stronger regulation may also be needed to control the behaviour of dominant firms, as is the case in the rail industry in some member states. For network industries the regulator should be an independent entity to insulate it from government and to avoid conflicts of interest (CS 5, 15, 16, 17, 18).

Coordination across modes

• Governmental structures and private sector bodies have a tendency to adopt a uni-modal focus and structure. Effective coordination across modes is important, particularly in infrastructure provision, service planning, regulation, financing and appraisal. In all of these areas care is needed to avoid inconsistent operating practices and modal bias, and to foster an integrated approach (CS 5, 6, 7, 8, 11, 12, 15).

• Formal administrative units within the Ministries of Transport should be established, with the aim of facilitating the implementation and increasing the efficiency of inter-modal transport. Regulation tends to, necessarily, exist at a uni-modal level. It is essential that instructions to regulators encourage integration between modes where appropriate (CS 15; D3).

Such authorities could potentially have the following roles and responsibilities:
- develop, implement and control the implementation of a strategic plan for achieving integration across transport modes,
- coordinate the activities of modal authorities and guide them towards a more integrative approach in developing and implementing their strategic plans,
- propose legal and political measures that enhance modal coordination,
- review and comment on the problems encountered by the political, legal, financial and technological environment that inhibit the increase of modal coordination,
- review the status of implementation of Community legislation on issues related to intermodal transport,
- identify best practices from the experience of other countries in increasing modal coordination.

• National government should provide financial incentives for the provision and upgrading of infrastructure which fosters inter-modal operation where this can be demonstrated to internalise environmental or congestion costs. Coordination is also important for projects that will materially affect the inter-modal balance of passenger or freight traffic and their resulting externalities (CS 15, 16, 17, 18; D3).

The social environment

• The key stakeholders, their relationship to each other and the dynamics within these relationships can have a particular impact on the acceptability of land use, regulatory and pricing policies. It will be important to identify the key actors and their relationships, to ensure that their underlying objectives are fully understood and potential conflicts are identified. In this way a coalition of stakeholder support can be developed (CS 1, 2, 3, 4, 11, 12; D3).

7.3 Recommendations for the elements of process

D7 (May et al, 2005) summarise the policy recommendations for the elements of process as follows:

Setting and quantifying objectives, goals and targets

• The objectives of the transport strategy need to be clearly articulated at the outset, and used throughout the decision-making process in a consistent way. Because objectives can be in conflict with one another, it is important to be clear as to their relative importance, so that trade-offs can be made as necessary (CS 1, 2, 4, 5, 6).

• Objectives should be expressed in terms of desired outcomes for society, rather than the means of achieving them (CS 5, 6).

• The misalignment of objectives between organisations leads to reduced policy effectiveness. Where different agencies have different objectives or priorities, these differences need to be taken into consideration at an early stage, so that any conflicts can be resolved (CS 1, 4, 7).

• The policy culture is important in deciding the value of setting quantified goals and targets. Quantified goals and targets are most important where there are significant constraints on simultaneously improving performance against all objectives. In such circumstances, they act as a valuable feedback to policy makers and the general public (CS 4, 6, 19, 20; D3).

• In the case of Public Private Partnerships, quantification of the criteria used to evaluate bids, the provisions of Concession Agreements and the quality of service have been conducive to effective project development and operation. Quantification
of policy objectives and targets also serves to diminish regulatory capture, by reducing the flexibility of negotiation between government and concessionaires (CS 3, 15, 19, 20).

Problem identification and perception

- Greater attention needs to be given to problem identification. The problems identified and perceived by planners are not always those considered most important by their stakeholders (CS 1, 4, 5, 7).

- The public have to understand the problem that a policy measure is designed to solve, and to perceive it as a problem. Where problems can be identified scientifically, but are not understood by the public or business, resources need to be spent on explaining them more fully. A failure to do so can lead to unsupported or aborted strategies and schemes (CS 1, 2, 4).

Identification of instruments and strategies

- Policy makers should consider the full range of policy instruments, including those from the fields of land use planning, infrastructure provision, management, regulation, information, awareness and pricing. Attention needs to be given to ensuring this happens when planning and funding is carried out on a uni-modal basis. (CS 5, 7).

- Flexible provision of funding and the balance between capital and revenue funds must be considered to avoid constraining strategy development and instrument choice at an early stage (CS 5).

- Central or regional co-ordination is required to ensure that the application of instruments, particularly those relating to demand management, is consistent across competing authority boundaries (CS 5, 7, 11).

Appraisal of alternatives

- An appraisal methodology which is consistent across modes and policy instruments helps to improve decision-making. Care must be taken to ensure that it captures all impacts and that all impacts receive proper consideration irrespective of whether they can be easily quantified and valued (CS 5, 6, 8, 10, 12, 15, 16, 17).

Decision-making under uncertainty

- Formal identification and management of risk and uncertainty are essential to prudent project management. Quantifying and apportioning risk to the different parties involved in project development makes these risks more transparent and can reduce the potential for negative impacts on other parts of a spending programme resulting from cost-overruns. In the case of Public Private Partnerships the various risks related to constructions, operation, markets, the macro-economy and public policy have to be allocated between the private partners, the public partners and the financing institutions (CS 3, 6, 19, 20; D3).

- Regulation can be particularly badly affected by unforeseen outcomes. Mechanisms to allow for reviews to absorb and adapt to such shocks are essential. The policy review of the structure of the rail industry in the UK in 2004 is a useful example (CS 18)
Perceived effectiveness of instruments

- The public has to be convinced that the proposed policy measure will solve the problem more effectively than other apparently more plausible solutions. Decision-makers have to inform the public of their intentions and to explain the effectiveness of the measure in a simple and comprehensible way (CS 1, 2, 3, 4, 11).
- Politicians need to be aware that the public will judge proposals initially based on their short run individual gains and losses. Where such losses will be offset by longer term and less tangible gains to society, these need to be clearly articulated and explained (CS 1, 3, 4, 5, 20).

Equity and fairness

- Society at large regards distributive as well as procedural aspects of fairness as important in judging a given strategy. Distributive aspects are always an issue, whereas procedural aspects become relevant only when they are seen to be violated. Decision-makers should give full consideration to fairness principles in developing and justifying their strategies. For example, the procedural aspects can be served by effective participation and consultation (CS 1, 2, 3, 4, 5, 10, 20).

Implementation planning and process

- If a given project mainly supports the transport policy goals of a specific jurisdiction the planning, financial and pricing responsibility should be given to that jurisdiction. If relevant functional overlaps exist some mechanisms for vertical and horizontal coordination should be implemented (CS 5, 6, 7).
- Implementation and planning processes should include full consideration of the management of policy instruments after their implementation including regulation and the costs and approaches to management and enforcement (CS 3, 9, 11).
- Devolution of powers combined with hypothecation of funding streams can act as a catalyst for the introduction of charging policies (CS 5, 11).
- Care needs to be taken in adopting a “big bang” approach to strategy implementation. The adjustment costs may be too great for smaller operators and transport users. There may well be entrenched opposition from unions and businesses affected. Short term instability can lead to substantial fluctuations in service levels and prices. These temporary negative effects could increase political opposition, negating the opportunity to achieve longer term benefits (CS 1, 2, 4, 5, 11).
- Where a big-bang approach is adopted even greater attention must be given to understanding the problem perception, equity and fairness considerations and the implementation and planning processes that are required (CS 1, 2, 4).

Monitoring, feedback and evaluation

- Regular monitoring is important in assessing whether problems are becoming more or less serious. Evaluation after implementation is crucial to the understanding of the performance of transport systems. The results of evaluations, whether positive or negative, should be fed back to those who introduced the strategy, and disseminated more widely (CS 5, 6, 19, 20).
- Public Private Partnership infrastructure projects are facilitated by feedback and evaluation mechanisms at all stages. These mechanisms help in reaching quantified targets (CS 3, 19, 20).
Knowledge management and the use of information

- Data and data processing limitations have been documented for all major transport modes in the EU. There is a lack of information on costs, demand, revenues and asset condition which limit effective regulation, management and accountability. Commercial confidentiality is a frequent barrier to information provision. Inadequacies in data are also an obstacle to the construction and calibration of forecasting models (CS 3, 13, 14, 15, 16, 17, 18).

- To address these deficiencies, national governments should establish independent, formally structured, information provision units, whose responsibilities should include defining, collecting, forecasting, structuring and disseminating information on transport problems and trends and the performance of policy instruments. Such units should be able to require relevant information from all relevant transport agencies (CS 5, 15, 16; D3).

Participation and consultation

- Participation of stakeholders should be formally incorporated into all stages of the decision-making process. Both public and private interest groups should have equal access to the process, and their roles in decision-making need to be clearly specified (CS 1, 2, 3, 4, 6, 19, 20).

- Good participation and consultation procedures may lengthen the initial stages of project development but are ultimately likely to lead to more successful outcomes. National, regional and local governments and other actors with diverse objectives are often involved in decisions on major projects. To make headway in such complex circumstances, dissemination of information, clear communications and opportunities for consultation and participation are essential. Both formal committees and informal coalitions have a role to play (CS 4, 6, 19, 20).

Conflict resolution

- The presence of a forum or process for conflict resolution is a supportive measure to the introduction of any contentious policy. Measures such as standardising information provision can be resolved through non-statutory bodies (CS 3, 5, 6, 14; D3).

- It is important to resolve possible conflicts with certain interest groups, such as those involved in consumer protection, before the launch of a policy measure, to take their arguments seriously and then involve them as much as possible in the implementation process (CS 1, 3, 4).

- For projects that involve large numbers of actors with diverse objectives, formal committees may help to reduce conflicts and provide a forum for suggested enhancements (CS 14, 17).

The involvement of interest groups

- A distinction needs to be made between public interest groups with broad societal objectives, and private interest groups with narrow professional or commercial interests. Both types of group should be afforded equal opportunities to participate in the policy making process (CS 1, 2, 4, 7, 15, 17, 20).

- Care is needed to avoid private interest groups with narrow professional or commercial interests using their involvement to secure benefits for themselves in ways which distort the specification or performance of the overall strategy. This danger is greater where one interest group has a dominant voice (CS 4, 10, 17, 20).
• It is important to recognise that it is more difficult to involve people who are less affected at an individual level than those who are more affected (CS 1, 2, 3, 4).

The involvement of the media

• Particular care is needed to explain to the media issues which may generate emotional reactions. Transparency in decision-making will reduce the potential for negative media coverage (CS 1, 4).

• Care is also needed with more complex or technical issues, which the media is less likely to take up unless they appeal to people’s emotions. Complex issues need to be presented to the media in an understandable format. Otherwise they will not appear in public discussion (CS 1, 2, 4).

• Politicians and transport managers should, where possible, avoid aspects of a strategy which allow the media or opponents to emotionalise an issue. This may require a modification to the overall strategy or the sequence in which it is implemented. In the extreme, this could lead to the strategy being less effective, but this may have to be accepted in the interests of achieving implementation (CS 1, 2, 4).

7.4 Annex to Chapter 7: Synthesis Tables A and B

D7 (May et al, 2005) presents in the Executive Summary (for more details see Section 11.7 in Annex to this Final Report) two tables – called “synthesis Tables A and B” – as providing a bridge between the conclusions discussed in Chapter 6 above and policy recommendations based on these conclusions. These tables depict the extent or strength of the interaction, relationship or influence between each element of structure and process and each policy instrument considered. The tables, numbered here Tables 8 and 9, are shown below.

D7 writes (the Executive Summary):

In order for TIPP to make recommendations on how one might change governance of transport policy or institutional structures to enable more effective decision making it is necessary to draw together the findings from the European survey and the case studies to identify which of the elements relating to decision-making processes and structures have an influence on the success or otherwise of policies. The results of this process are described below.

Tables A and B show the extent to which the investigations across the case studies found the different aspects of the decision-making structure and process to have an influence on the policy and implementation process. The relationships identified are therefore those that exist today, not those that the research team feels ought to exist. The strength of the relationship identified is a useful first indication of where to expect significant interactions between structures and processes and different policies. The strengths are based on the experience of the research team for the contexts examined. It may be that under different circumstances, some of the relationships may be more or less important. Where we would intuitively expect a medium or strong relationship to exist between the elements and the policy instruments but the evidence from our studies is not yet clear, the box is shaded. Where we have no evidence and are uncertain whether any exists within the data set the box is left blank. Where it is not considered possible for the elements to impact on a policy instrument this is marked with not applicable (n/a). Full details of how these decisions were arrived at are contained within this [Final Report] report in [Chapter 6]. In summary however, the research shows that each of these elements can have an impact on effective policy making. For the majority of elements
the impacts can work both ways e.g. good perceived effectiveness has a positive outcome on policy instrument selection and implementation and poor perceived effectiveness damages prospects for selection and implementation.

These conclusions were used in turn to develop a set of recommendations for each of the elements of decision-making structures and the decision-making process. It is important to bear in mind that these recommendations are based on the chosen case studies and, to some extent, the prior analysis of national structures and processes in Deliverable 3 [Zografos et al, 2004]. Each recommendation indicates the case studies on which it draws. Where fewer case studies are listed, the recommendation is inevitably more speculative. Even where several case studies are listed, the recommendation may need testing in other contexts. In general, those recommendations which are readily adopted should be pursued, subject to checking that the context for application is sufficiently similar to that of the relevant case studies. Where a recommendation is more contentious or more difficult to adopt, it would be worthwhile to conduct more focused research into it. Whilst the data collection and synthesis presented in Chapters 1 to 5 [of D7] was based on a positive approach, recommendations are, by their very nature, driven by normative considerations. The recommendations are not driven by one common normative paradigm. Indeed, they are drawn out based on the participants' experience and observation of the current state of implementation, the perceived and reported problems of the project team and participants respectively. They are, therefore, a reasoned conclusion about what approaches are successful and how more difficult measures could be better implemented. We place significant importance on the fact that these are evidential based recommendations (accepting the limitations discussed above). The evidence trail that brings us to the recommendations is clearly identified and transparent within the report.”
<table>
<thead>
<tr>
<th>Decision-making structure element</th>
<th>Influence of element on Policy Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land use measures</td>
</tr>
<tr>
<td>The role of the EU</td>
<td>Strong</td>
</tr>
<tr>
<td>The role of international agencies</td>
<td>n/a</td>
</tr>
<tr>
<td>The role of national government</td>
<td>Strong</td>
</tr>
<tr>
<td>The degree of centralisation</td>
<td>Medium</td>
</tr>
<tr>
<td>Influences from other tiers of government</td>
<td>Strong</td>
</tr>
<tr>
<td>Influences from adjacent authorities</td>
<td>Strong</td>
</tr>
<tr>
<td>Institutional consolidation</td>
<td>Strong</td>
</tr>
<tr>
<td>The role of the private sector</td>
<td>Strong</td>
</tr>
<tr>
<td>The degree of regulatory intervention</td>
<td>Medium</td>
</tr>
<tr>
<td>Coordination across modes</td>
<td>n/a</td>
</tr>
<tr>
<td>Social environment</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Table 8: “Table A” – Analysis of importance of decision making structure element by policy instrument (Source D7 (May et al, 2005))
<table>
<thead>
<tr>
<th>Decision-making process element</th>
<th>Influence of elements on Policy Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land use measures</td>
</tr>
<tr>
<td>Setting and quantification of objectives, goals and targets</td>
<td>Strong</td>
</tr>
<tr>
<td>Problem identification and perception</td>
<td>Medium</td>
</tr>
<tr>
<td>Identification of instruments and strategies</td>
<td>Medium</td>
</tr>
<tr>
<td>Appraisal of alternatives</td>
<td>Strong</td>
</tr>
<tr>
<td>Decision-making under uncertainty</td>
<td>Medium</td>
</tr>
<tr>
<td>Perceived effectiveness of instruments</td>
<td>Strong</td>
</tr>
<tr>
<td>Equity and fairness</td>
<td>Medium</td>
</tr>
<tr>
<td>Implementation planning and process</td>
<td>Medium</td>
</tr>
<tr>
<td>Monitoring, feedback and evaluation</td>
<td>Strong</td>
</tr>
<tr>
<td>Knowledge management and the use of information</td>
<td>Strong</td>
</tr>
<tr>
<td>Participation and consultation</td>
<td>Strong</td>
</tr>
<tr>
<td>Conflict resolution</td>
<td>Medium</td>
</tr>
<tr>
<td>The involvement of interest groups</td>
<td>Strong</td>
</tr>
<tr>
<td>The involvement of the media</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: “Table B” – Analysis of importance of decision making process element by policy instrument (Source D7 (May et al, 2005))
8 THE FRAMEWORK FOR RESEARCH RECONSIDERED

The TIPP project in many respects entered a new unknown territory of research. It was felt many questions (principle and practical questions) arose for which there was no tested solutions and practices to be found in the existing research. One set of such questions considered the very basic approach or framework for organizing and carrying out the research, and consequently also for organizing the project’s overall conclusions and recommendations. These questions were discussed throughout the study. These questions also been addressed in relevant sections in the earlier parts of this report. This Chapter 8 aims to go deeper in describing how these issues were raised and solved within TIPP, what kinds of alternatives would have been available, and most importantly what lessons based on the TIPP experiences may be able to suggest for future research.

The objectives of this section are threefold. First, to clarify and further our understanding of the approach or framework adopted by TIPP (originally introduced in D2 (May et al, 2003)). Second, to introduce an alternative approach (originally introduced in D1 (Niskanen et al, 2003)) and compare it with the adopted TIPP approach. And third, of course, based on these considerations (and the TIPP experiences) provide lessons for future research.

Section 8.1 clarifies the question why are we talking of the framework here, why is it so important? And what is it? Section 8.2 discusses different (alternative) perspectives to research raised and discussed within the TIPP project; the framework should make these explicit as well as motivate the choices the project has made in these respects.

Section 8.3 describes an approach to the framework (originally introduced in D1) which argues and suggests that the key areas and instruments of Common Transport Policy (CTP) should be taken to be at the centre of analysis; accordingly, the approach is labelled “policy based” or “CTP based”. Section 8.4 summarises the TIPP approach labelled here as “institutions based” approach; as explained in Chapter 3 and later implemented in Chapters 6 and 7, this took the key elements of structure and process to the centre of analysis.

Finally, Section 8.5 offers a resolution: which one – the policy based or the institutions based – is the most appropriate approach or framework depends on the objectives of research; also illustrates the general ideas in terms of more concrete research questions and hypotheses that would be possible or typical under the different approaches.

24 In saying this, the need for such a common framework in a large and multisided project like TIPP is taken granted. The TIPP Description of Work reflected this view in allocating notable amount of resources and time for the development of the framework.
8.1 Why project framework? What is it?

The term “project framework”, or “analytical framework”, as used in this report, and also generally understood within the TIPP project refers to an overall guidance and instructions to carry out the research work (theoretical and empirical) in the different parts of the project in consistent, efficient and effective ways. These guidance / instructions, in order to influence the research in the intended ways, should naturally be presented and discussed during the early stages of the project, and certainly before the start of the case studies. Equally obviously, to guarantee maximal synergy benefits, these kinds of guidance/instructions should be presented at a general or conceptual level and hence at the project level.

Ideally, the analytical framework could (should) be designed to specify:

1. Basic (key) concepts, elements, dimensions and the like
2. Scope or coverage of analysis
3. Focus of analysis
4. Key research questions and hypotheses – for instance considering key interactions, relationships, influences and the like
5. Theories and their potential usefulness in analysing the above-mentioned issues
6. Links to actual policies and policy areas

First, the analytical framework should identify and define certain basic concepts, elements, dimensions, etc, of analysis. Considering the objectives of TIPP, numerous things come to mind here. Perhaps the most fundamental issue to clarify first (the need for this was strongly felt in the beginning of the project) is the concept of ‘institution’. Drawing on the existing literature, TIPP distinguished between formal and informal institutions, and covered both. Another set of key concepts or elements are the policy objectives, goals and targets that policymakers may pursue, and the instruments that they may use for achieving those objectives/goals/targets. A further set of basic concepts/elements that the framework should identify is key actors. Furthermore, the framework may identify (at least tentatively, as the research may bring up new information concerning them) main barriers and constraints to implementing the instruments and policies. And so on.

Second, the analytical framework should define the scope or coverage of the analysis; clearly this should be defined at the conceptual or project level. Third, for a given scope/coverage, the framework should define the focus of analysis. The analysis would be rather superficial, dull and ineffective if it equally aimed to cover all possible issues that might be considered relevant (and hence in principle included within the agreed scope/coverage). Clearly some choices need to be made in these respects, and it would be most useful to make also these choices at the conceptual / project level. Fourth, the analytical framework should describe some generic research questions and hypotheses that would link the different case studies (in TIPP they are 20 in total) together. Identifying and elaborating on such questions and hypotheses would also help in sketching the overall structure and logic of analysis. This is because the research questions and hypotheses most likely would address certain key
relationships between the basic concepts and elements of analysis and thus would identify and illustrate their nature and role in the analysis. Fifth, the analytical framework needs to show clear understanding of the available theories that can be potentially used to analyse the considered issues. It should provide concrete guidance on how the different theories could possibly be used. D2 (May et al, 2004) (originally D1 (Niskanen et al, 2003)) identified relevant such theories to include game theory, institutional economics, regulatory theory, public choice, psychological theories, and sociological theories.

Sixth, and last but certainly not least important, in a research project like TIPP, which aims to derive practical policy recommendations as its main outcome, the analytical framework should make explicit how the key issues researched are related to actual policies implemented or considered for implementation and the related policy areas (at the EU level and otherwise). Certainly the analysts/researchers should put efforts in order to identify and describe these links already at a project level.

The analytical framework, by its nature, only presents an overall picture at a general level. However, already at this level of generality, very different choices can be made. These choices may greatly affect the nature of the analysis, and hence also the nature of policy recommendations that possibly can be derived based on the results received. In particular, within the TIPP project two fundamentally different approaches to, or interpretations of, the analytical framework were discussed. Both these approaches to the framework assume, roughly speaking, the same basic concepts and elements, the same scope/coverage of analysis, and the same theories, i.e. items 1, 2 and 5. But there are sharp differences as far as items 3, 4 and 6 are concerned.

8.2 Different perspectives and approaches to the research and the framework

Within the TIPP project were suggested and discussed different perspectives and approaches to investigating institutional issues of transport policy implementation. As explained above (Section 8.1), the purpose of the framework for research as understood within TIPP is to make the project’s choices in these respects explicit and based on this derive/propose concrete guidelines/instructions to later parts of the project. And of course, provide a structure at the end of the project for drawing the results of the large number of case studies and surveys (in TIPP 20+4) together into the project’s overall conclusions and policy recommendations. (As stated in Section 2, this was one of the main objectives of the TIPP project.) The following two dimensions, in particular, were highlighted in the project’s discussions as key elements.

First, a distinction was made between the familiar perspectives of top down and bottom up. That is, should the research (project) try to cover all aspects of transport policymaking, appropriately defined (this is discussed below), or should the research take the liberty of focusing on certain aspects or issues only that appear most interesting/important or most natural things for the project to do? Second, thinking of the top down, should the main concern be whether all areas of the Common Transport Policy CTP will be covered, or should all aspects of the institutions, organizations etc having influence in the transport field be covered, or perhaps both? Certainly all these dimensions and perspectives in themselves are important and useful to be aware of.
and also consider in a project like TIPP, and clearly they also should be possible to allow in parallel within the same project (are not contradictory as such). While stating this, it is equally obvious, however, that some choices need to be made which ones to take as the main approach; otherwise the research work extending over parallel and consecutive work packages and case studies most probably will become an disorganized mess.

These issues were discussed throughout the project but the foundations were laid down in D1 (Niskanen et al, 2003) and D2 (May et al, 2004); the issues were partly raised and identified explicitly and partly were allowed only implicitly. The next sections 8.3, 8.4 and 8.5 describe the issues raised and the approaches proposed by these reports in more detail.

8.3 Policy based (CTP based) approach: structured by key areas and instruments of Common Transport Policy (CTP)

D1 (Niskanen et al, 2003) stressed the perspective of the Common Transport Policy (CTP). It defined the top down approach to research from this perspective: in this approach, as a starting point for the research, would be identified all relevant aspects of the CTP and a major concern in the analysis would be to make sure that all relevant aspects will be covered (as much as possible) in the consequent analyses.25

After contrasting the planned case studies (in the Description of Work) and the key areas of CTP, D1 ended up suggest the bottom-up as the main approach (Executive Summary):

“…we however suggest that the bottom-up approach should be the main approach for the rest of the project. Our belief is that this strategy, whilst reflecting the original spirit of the case studies [in the Description of Work], will also generate and facilitate more innovative research.”

D1 developed directions for a framework that would reflect the bottom up approach and would focus (cf item 3 in the list of Section 8.1 above) on practical policy implementation problems. The proposed framework or approach would direct the case studies to identify and categorise most important such problems, and to tentatively define research questions and testable hypotheses concerning them. D1 stressed that the relevant policy implementation problems may be due to reasons inherent or internal to the transport policy decision-making and implementation systems or external to these systems (acceptability, markets, industry, etc). (To this end, case study authors were invited to propose hypotheses for their case studies, and these were presented in an annex to D1.)

More particularly, D1 writes (Executive Summary):

“… each case study… needs to start with:

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25 To make the point concrete, D1 for example presented Table 5.3 in Section 5.3 showing the links between the three themes of research in WPs 4,5 and 6 and the key areas and instruments of the CTP.
1. describing the policy implementation problems they are going to address, with special emphasis on the ETP\textsuperscript{26} vs national/regional/local level aspects and elements and interaction;
2. identifying the constraints or lack of enablers that most likely are causing the stated implementation problems, whilst distinguishing issues between different levels and recognizing that the actual case study analysis may rise further ideas and results;
3. defining the policy questions – how to address the implementation problem and correct or alleviate it – with special emphasis on the distinction between the ETP vs national/regional/local level issues and their interaction;
4. describing the methods and stages of analysis;
5. describing the anticipated results, again distinguishing between the ETP vs lower level elements or aspects and how these may interact and/or complement each other.

This procedure will guarantee a uniform and structured treatment of the case studies. And it will guarantee transparency by requesting each case study to clearly indicate where the main policy conclusions will be: do they contribute to the European or national or local level policymaking or both, and if to both then how do the contributions interact and complement each other?"

D1 stressed that the five issues or steps as identified (in the quote) were defined here at a very general level and were meant to be tentative; the report stressed that during the course of the study the issues/steps would need to be reconsidered and possibly revised and completed (in light from the feedback from the surveys and case studies).

Anyway, in this approach a systematic and relatively comprehensive (e.g. based on literature and common sense) consideration of the types of implementation problems (including barriers), and of potentially useful research questions and hypotheses would be given at a conceptual or project level. These developments also would to a large extent define the key relationships and structure (cf item 4 in Section 8.1) of the analysis. Furthermore, the links between the considered policy implementation problems and the key policy areas (item 6 in Section 8.1) would also be systematically explained. These links would be a natural thing to consider and establish at the general or conceptual level, and hence at the ‘project level’, for two reasons: first, because of the particular definition of the top down (“CTP based”), and second, because discussion of concrete implementation problems would not be possible without explicit references to certain policies or policy areas.

### 8.4 Institutions based approach: structured by key elements of structure and process

As mentioned in Section 8.2 and discussed in more detail earlier in Chapter 3, D2 (May et al, 2004) proposed an “institutions based” framework for the TIPP research. At the centre of the approach, and its driving force, was the aim to make sure all relevant elements and aspects of transport policy decision-making and implementation systems (rather than of the CTP) are included – whether objectives, instruments, actors, and so on. As also said, the TIPP project decided to follow this approach, based on the analysis of D2. Broadly speaking, as was discussed in Section

\textsuperscript{26} ETP stands for European Transport Policy which D1 used as a substitute for CTP or Common Transport Policy.
8.2 and in more detail in Chapter 3 earlier, this meant that the project defined as its strategy the broad investigation of all possible aspects of the decision-making and policy implementation systems, rather than focusing on investigation of those aspects of the systems that appear to be the most critical considering key implementation problems (cf item 3 in the list of Section 8.1).

The proposed analysis thus started by identifying the key dimensions of transport (these aimed to cover all possibly relevant aspects), and a major concern in the analysis was whether all these dimensions and their sub-dimensions would be covered. This amounted to the top down as a major approach (talking on ‘top down’ here is an interpretation, D2 itself did not use the term to characterize its approach). Moreover, as already indicated, the top down perspective was understood and defined in relation to institutions and organizations in the transport field including the decision-making and policy implementation systems (rather than of the CTP): a starting point for the research would be to identify all relevant dimensions and sub-dimensions of these systems and a major concern would be to make sure that all relevant aspects or dimensions of these systems would be covered (as much as possible) in the consequent analyses.

The adopted framework had two important implications to the later parts of the TIPP project. First, it meant that the practical guidelines/instructions from a project level to the case studies (and surveys) focused on issues of coverage and in particular in regard to the decision-making and policy implementation systems: the case studies (and the surveys) were asked to investigate whether the category of the key dimensions and sub-dimensions developed as part of the framework is complete (and correct). Which of the suggested dimensions and elements are relevant, and can new dimensions/elements be identified which were not included in the original category? Second, the framework proposed that the project’s synthesized conclusions and policy recommendations at the end of the project (i.e. in D7 (May et al, 2005)) should be arrayed by key “elements of structure and process” (rather than, say, by key areas and instruments of the CTP). The case studies and surveys were asked to contribute to the identification of these elements. This request was related to or part of the requirement to check whether the category of the key dimensions is correct and sufficient. Indeed, the key elements of the structure and process were defined a part of the key dimensions.

Evidently, these kinds of choices can have great impact on the way the key research questions and hypotheses (item 4 in the list of Section 8.1) are defined. Similarly this can affect the way the links to actual policies and policy areas (item 6 in Section 8.1) will be presented. And most importantly, this can affect the overall nature of the results and policy recommendations the analyses and the project are able to generate. In light of this, the fact that also the presentation of the project’s overall conclusions and recommendations are organized by the elements of structure and process (as reported in Chapters 6 and 7 above) represented and reflected the particular (“institutions based”) top down approach adopted: a main concern also here was to make sure that in the conclusions and recommendations all aspects of transport policymaking (in regard to the involved institutions and organizations and related structures and processes rather than in regard the CTP) would be covered. (Certainly these did not need to receive equal weight in the sense that they all would have given equally long lists of conclusions and recommendations; the allocation of these of
course depended on the nature of the case studies that were designed more or less independently of the desire to cover all elements here.) While doing this, no particular attention was given to the other interpretation or aspect of the top down discussed above: that all areas of the CTP would be covered (again, not equally in the sense that them all would be given the same number of conclusions/recommendations but rather that they all would at least be commented on in the formal analysis.)

This approach necessarily led to relatively long lists of conclusions and recommendations (as was seen in Chapters 6 and 7). On the other hand, there was no obvious criterion for distinguishing between more important (primary) conclusions / recommendations from less important (secondary) – simply because the research did not particularly focus on any individual element. Also, for each element of structure and process, any conclusion / recommendation no matter which policy or instrument it is related to, would be equally relevant to include. This also (at least partly) explains the stated ‘problem’ (discussed in Chapter 3 above) of defining common hypotheses at a project level: for each element of structure and process there indeed was a great number of different potential research questions and hypotheses (covering all the three themes for the case studies) and choosing between them a priori would have been impossible.27

8.5 Resolution: it depends on the objectives of research

Sections 8.2-8.4 above discussed different approaches and perspectives to the research into institutional issues of transport policy implementation. Table 10 summarises the approaches and perspectives discussed:

<table>
<thead>
<tr>
<th></th>
<th>“Policy based” or “CTP based”</th>
<th>“Institutions based”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top down</td>
<td></td>
<td>TIPP (D2) approach*</td>
</tr>
<tr>
<td>Bottom up</td>
<td>D1 approach</td>
<td></td>
</tr>
</tbody>
</table>

*) Naturally in practice, the individual case studies besides investigating the relevance of the proposed dimensions and sub-dimensions in their case study context, also investigated policy implementation issues/problems. In this sense, the bottom-up perspective was of course represented in most of the case studies.

Table 10: Summary of approaches

Sections 8.2-8.4 also discussed the implications of the different approaches to the research. So the question is: How to choose or decide? How to know? The correct answer obviously depends on the objectives of the research in question.

27 D2 (May et al, 2004) states that it is not possible to define any generic research questions and hypotheses concerning them either. When proposing the approach, D2 states that it would not be meaningful or useful, or possible, to identify or categorise potential practical implementation problems at the general conceptual or project level. The report does not discuss or emphasise the term ‘implementation problem’ either but leaves it to the case studies (and surveys) to decide on to what extent to focus on such problems or not at all, and if focus and address such problems then how. D7 (May et al, 2005) later confirmed these views.
In particular, in regard to TIPP it is appropriate to ask: Has the objective of research been to investigate decision-making systems as a whole (all relevant aspects) or to carry out more focused studies on (systematically, based on initial surveys, interviews, etc) identified/defined policy implementation problems? And has the objective been to produce policy recommendations for policymakers in charge for particular policies or instruments, or to produce more general background information (with perhaps little direct use value for the policymaker when considering implementation of a particular policy)?

To illustrate the issues further, we can also try to formulate and categorize possible research questions and hypotheses at a more concrete level. (This allows place the TIPP analyses against a more general background, and also should be useful considering further research on these issues.) So how to categorize in more detail different types of research questions and hypotheses, and hence also the different types of empirical analyses that are possible in a project like TIPP?

An obvious starting point for a potential such categorisation is provided by the distinction between the “policy based” and the “institutions” based approaches to research as discussed above. The following categorisation is based on these ideas. 28

First, under the “policy based” approach, and given the consequent focus on policy implementation problems, the relevant research questions, hypotheses and the consequent analyses could focus on:29 30

1. Key barriers to efficient and effective policy implementation
2. Impacts of barriers to policy as actually implemented and ultimately to transport markets and welfare
3. Optimal roles of key actors and optimal institutional reforms to avoid or lower identified barriers and their detrimental impacts on policy, markets and welfare.

28 Of course, in addition to the two broad types of analyses identified here should be mentioned descriptive analyses: Reviews and surveys that aim to gather all kinds of information (general or detailed) on practical institutional systems, settings, structures, processes, and so on, but do not aim to analyse the information any deeper. These types of analyses typically present as their results or conclusions: Lists/categorizations/classifications/typologies, etc of key elements (of analysis) such as objectives, instruments, actors, decision-making systems, and barriers.

29 Analyses (formal or informal) that focus on investigating policy implementation problems, through identifying, assessing (strategic importance) and explaining them and seeking solutions to them e.g. through lowering or eliminating underlying barriers and constraints that may be causing those problems. Reflecting the classification adopted for organising the TIPP case studies as discussed in Section 2, relevant such problems may be due to low acceptability, inappropriate government structure or endemic industry characteristics (e.g. monopoly power or international nature of decision-making in aviation and shipping).

30 Naturally this categorization of different types of analysis and result is at a very general level. However, as will be seen, it can provide a useful reference or framework for the consequent discussion on which types of analysis the TIPP case studies have carried out and which types of result they have (mostly) produced. Perhaps the best characterisation is that D4 represents a mixture of all types 1-6 whereas D5 and D6 clearly represented types 4-6.
Second, under the “institutions based” approach and the consequent focus on decision-making and policy implementation systems and other relevant institutions and organisations, the relevant research questions/hypotheses/analyses could focus on:

4. Efficiency/effectiveness of centralised vs decentralised or otherwise distinguished alternative institutional systems and arrangements in adopting and implementing policies
5. Influence of different aspects/elements (factors, conditions) of decision-making systems on efficiency and effectiveness of implementation
6. Optimal roles for key actors and optimal institutional reform based on the efficiency etc properties of alternative institutional systems at a general level

When comparing the two approaches discussed here – the “policy based” approach and the “institutions based” approach – it is obvious that the former is natural to adopt when the objective of research is to investigate policy implementation problems in order to produce detailed policy recommendations related to particular policies/instruments. And the latter is natural to adopt when the primary objective of research is to investigate decision-making and other relevant institutions and, evidently, in order to provide suggestions for designing institutional reforms, possibly even changing the overall structures and processes (which certainly are not always the task of transport sector policymakers only). That is, it is quite obvious that, from the viewpoint of transport sector policymaking and policy implementation, the analyses dealing with the decision-making and implementation systems in general are tended to produce results that have relatively little direct use value (for the policymaker in charge for a particular policy or instrument) but rather can be used as general background information (on the efficiency and other properties of the systems). The analyses focusing on specified policy implementation problems would instead more likely lead to concrete policy recommendations related to particular policies/instruments.

Despite this classification, in practice of course in any reasonable project both areas and aspects would have to be allowed to some extent. Evidently also in a project like TIPP, both types of research questions / hypotheses have been relevant and have been needed. The right question instead is: what is the optimal mix or balance between them?

The TIPP project was designed to investigate institutional issues of transport policy implementation. The Description of Work spoke about both decision-making and policy implementation systems (structures, processes, etc) and concrete problems of implementing specific policies through these systems. In principle, the project could

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31 Analyses (formal or informal) that aim to identify, verify and explain causal and other relationships between various characteristics or aspects of these systems / institutions / organisations and various performance (efficiency, effectiveness, equity, fairness, etc) properties of the decision-making and implementation systems.

32 Of course poor efficiency / effectiveness of the decision-making and implementation systems may also be regarded as implementation problems. The difference between the analyses of the decision-making and implementation systems and of the implementation problems may not always be very big in the sense that the issues addressed can largely be the same; however, it is the perspective, scope and the goal or motivation of analysis that are different.
have developed into either one direction: either towards investigation of decision-making and policy implementation systems or investigation of problems of implementation. The adopted (“institutions based”) framework meant that the project in the main developed into the former direction i.e. the investigation of systems rather than of problems. The structure of the project’s conclusions and policy recommendations in Chapters 6 and 7 also strongly reflects this feature.

In practice within TIPP, no common the research questions and hypotheses were defined at a project level but within the case study work packages only. Therefore, the question to what extent analyse systems, institutions and organisations and to what extent specific policy implementation issues/problems (identifiable within those systems, institutions and organisations or caused by them) became highlighted within each case study work package when preparing the guidance/instructions to the individual case studies (WPs 4, 5 and 6 respectively with 4, 8 and 8 case studies).

To conclude, it should be stressed that the purpose of comparing the two approaches to the project framework here (originally from D1 (Niskanen et al, 2003) and D2 (May et al, 2004)) has not been to try to argue that one approach as such would be better than the other, or that the approach/framework adopted within TIPP and hence the results/conclusions and policy recommendations produced within the project in themselves would be wrong, or of wrong type. Rather, the point is to make the point to explain why the results are what they are, and what kinds of alternatives there would have been to the choices made (at a general framework level). And what could have been the likely implications of the different choices. This kind of discussion is important (necessary) considering the suggestions for future research that one can make based on the TIPP work. But this certainly should also help to assess and appreciate the TIPP results themselves as they are. The above discussion and the whole report, has aimed to demonstrate that the TIPP results are a result of intentional choices made within the project, first, at a project level when deciding on the project’s overall framework, and, second, within each case study work package when deciding on the common research questions/hypotheses (for their case studies to consider).
9 CONCLUDING COMMENTS

Three areas or levels of analysis

Broadly speaking, the contributions of the TIPP project have been in three areas, or at three levels:

1. Methodological contributions
2. Main empirical results
3. Policy recommendations

The methodological work (area 1) was designed to generate results, guidance and instructions that would direct the empirical work (item 2) and the drawing of the recommendations (item 3) most effectively given the various limitations of the project (timetables, resources, etc). Such a guidance and instructions were certainly needed in TIPP, as the project carried out 4 parallel country surveys thought to be representative of all other European countries and as many as 20 parallel case studies covering different European countries and cities, different levels of policymaking and all main modes.

The guidance/instructions from the project level were needed in order to guarantee maximal synergy benefits from the surveys and the case studies. Clearly the benefits from the overall results can be achieved only when there are clear links between the three steps or levels of analysis as identified above, when there is a clear logical link from the key aspects of the methodological developments to the organization of the results and the recommendations. This TIPP Final Report has aimed to discuss these issues: the implications of the basic choices concerning the adopted methodology to the different analyses (surveys, case studies, syntheses) carried out within the project and to the project’s outcomes (empirical results, policy recommendations).

Presentation of results

TIPP covered a broad range of issues and practical situations. Its main purpose was to produce results/conclusions and policy recommendations that policymakers at different (EU, national, local/regional) levels would find interesting and useful. At the same time, it was expected to present its results in a way that these would be appreciated among the scientific community. That is, for example, the results should be presented in a way that is transparent considering the theoretical foundation of analyses and the internal logic of the reasoning leading to the results. When considering the presentation of the TIPP results to policymakers, the scientific community, but also to the media and other wider audiences, it is important to pay particular attention to the question how to structure the project’s results in the most favourable way considering their potential reception and use by others.

In particular, in a large project like TIPP with as many as 20 case studies (and 4 broad country surveys in addition) and a large number of different kinds of empirical analyses covering different geographical and policy areas, it is important to pay particular attention to the question how the results, conclusions and policy
recommendations that will be offered as the project’s main outputs should be structured (arrayed) for presentation. (This discussion in the first place refers to synthesized conclusions/recommendations at a project level, rather than the results that an individual case study wishes to present based on its own analysis.)

The TIPP project arrayed the results of the case studies and the country surveys by the “elements of structure and process.” This was a logical conclusion for the project to do, after the particular form of the analytical framework was agreed upon. This procedure has been consistent with the analytical framework that the project had assumed; in fact, it has implemented the assumed framework (concerning the organisation of the project’s main results).

Evidently, this approach to presenting the TIPP results from institutional analysis naturally cannot be the only one possible, and may not be optimal. Indeed, considering the presentation of (‘selling’) the project’s conclusions and recommendations to policymakers, the scientific community, the media and the public at large, summarising and synthesising the case study results through the “elements of structure and process” may strike as rather narrow and inflexible. Therefore, in order to fully appreciate the usefulness of the adopted approach and to provide also alternative directions for future research based on the experiences of the TIPP study, it is important to consider also other possible approaches and contrast the adopted approach against them.

**Self-assessment**

This Final Report has explained and demonstrated that, given the adopted approach to investigating institutional issues of transport policy implementation, formulated in terms of an analytical framework, the choices that the TIPP project has made considering the case studies (and the surveys) and their synthesis into the overall project conclusions and recommendations have been logical all the way. The project has consistently implemented the analytical framework that was developed and agreed. The report has aimed to make a transparent synthesis of how the framework has been implemented and how the project has benefited from it.

Whilst doing this, the report has also made some self-assessment and has aimed to identify and discuss potential weaknesses in the implemented approach/framework. The main purpose in this regard has been to convince that the project has been aware of alternative and also essentially different approaches that also would have been possible. To some extent this report can be seen as providing an extension of the implemented approach, and with the aim to give a broader and more comprehensive picture to avoid possible criticism for recommending in an orthodox way the one approach only that the project had developed. Two examples are mentioned next (both of these were referred to earlier).

First, not surprisingly, presenting the conclusions and policy recommendations separately for all of the 11+9+5 elements led to rather long lists of conclusions and recommendations for the project to present as its main outputs. Trying to ‘sell’ the project’s main conclusions and recommendations to policymakers, the scientific community, the media and the public at large, through presenting them these detailed long lists, may not be an easy task. Thinking again of a typical reader, he/she may
wonder whether the offered conclusions and recommendations could be summarised, somehow, in a more compact form (in 1-2 pages rather than in 10-30 pages)

A second feature of the conclusions and recommendations such as the project has produced them is that, although some of them are clearly specific to a particular policy or instrument, individual conclusions/recommendations dealing with the policy or instrument are scattered across the 11+9+5 elements of structure and process, rather than being collected under a common title referring to the relevant policy or instrument. It may be difficult for a busy reader to identify these and to form a comprehensive picture (such as the project’s results might allow) of institutional implementation issues related to that policy or instrument. (Of course, one may ask why should the reader do this, if the project did not want to?) This feature highlights the obvious fact that, while the implemented structure of the conclusions and recommendations (i.e. by the elements of structure and process) may well serve the needs of a reader who likes to view and structure the issues of transport policy implementation from the perspective of institutions (what is said in relation to each of them? are they all covered? etc), the structure may be inconvenient for a reader who would like to classify and perceive institutional policy implementation issues by policy areas, policies, and individual policy instruments. Policymakers at least may typically belong to the latter category.

Evidently there is some room for potential misunderstandings or disappointments in these respects. Clearly it is necessary to complete the project’s presentation of its approach and conclusions/recommendations by placing these against a more general background and as part of this also to demonstrate how these relate to the particular approach that the project had adopted. This Final Report has aimed to clarify these issues to some extent. We hope that, in contrasting the different choices made within the project, and possible alternative choices that could have been made instead, this report has been able to provide a broader picture against which the TIPP analyses and the achieved results, conclusions and recommendations can be assessed. This should help to increase our understanding of the issues investigated in the project, and, we hope, also should help the reader to understand and appreciate the efforts and the achievements of the project overall. And in so doing can ultimately increase the potential use of the TIPP results and recommendations, whether as a basis for policymaking or further research.

In contrasting the different choices made within the project, and possible alternative choices that could have been made instead, we also wish this report has been able to provide a broader picture against which the TIPP analyses and the achieved results, conclusions and recommendations can be assessed. This should help to increase our understanding of the issues investigated in the project, and, we hope, also should help the reader to understand and appreciate the efforts and the achievements of the project overall. And in so doing can ultimately increase the potential use of the TIPP results and recommendations, whether as a basis for policymaking or further research.
10 REFERENCES


11 ANNEX: DELIVERABLE SUMMARIES (D1-D7)

This Section 11 aims to give an overall picture of the issues addressed, the analyses carried out, and the results achieved and conclusions made in the different parts of the TIPP project, through the Executive Summaries of the seven TIPP deliverables.

Sections 11.1, 11.2 and 11.3 describe the methodological aspects and basic surveys of the project as reported in the Executive Summaries of D1 (Niskanen, et al, 2003), D2 (May et al, 2004) and D3 (Zografos et al, 2004). Sections 11.4, 11.5 and 11.6 summarise the case study analyses and results, here through the Executive Summaries of D4 (Seidel et al, 2004), D5 (Peters et al, 2005) and D6 (de Palma et al, 2005). Finally, Section 11.7 offers a summary and synthesis of the methodological and scientific contributions and policy recommendations such as presented in the Executive Summary of D7 (May et al, 2005).

11.1 Setting the stage (D1 summary)
See a separate annex.

11.2 Theoretical framework and foundation (D2 summary)
See a separate annex.

11.3 Country surveys (D3 summary)
See a separate annex.

11.4 Four case studies on acceptability of pricing policies (D4 summary)
See a separate annex.

11.5 Eight case studies on government structure (D5 summary)
See a separate annex.

11.6 Eight case studies on industry characteristics (D6 summary)
See a separate annex.

11.7 Synthesis of empirical results and policy recommendations (D7 summary)
See a separate annex.