

MAJOR TRANSPORT PROJECTS: CAN PLANNING AND IMPLEMENTATION BE IMPROVED?

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Abstract

This paper reports on a 3 month desk study which compared the planning and implementation procedures of major transport projects in each EU Member State. It contributes to the current debate on how best to implement major infrastructure projects. A literature and internet review studied the evolving planning systems in the EU and identified 14 case studies to illustrate planning and implementation in Europe. Case studies were analysed from France, Germany, Greece, Portugal and the UK. Considerable variations in national procedures were identified reflecting different constitutional, legal and cultural conditions in each country or region. Although the formal process of approval in some countries appeared to follow a similar course the reality was that there was much negotiation going on outside the formal system. The implementation of the major infrastructure projects were complicated due to their size and influence on a large number of local authorities, their costs and their significance to countries and regions. This often resulted in the planning and decision processes being lengthy and costly. No single country or case study was identified which carried out best practice in planning and implementation but a best practice framework was developed from the successes within separate components of the case studies. Key to best practice included political will and drive, public support, a key actor or actors with good project management and mediation skills and financing.

Keywords: Major infrastructure; Planning; Implementation; Financing; Political will
Topic Area: H2 Public/ Private Partnerships and Major Infrastructure Projects

1. Introduction

Each European Union (EU) Member State has its own planning procedures and this paper summarises work carried out for the European Parliament which compared the planning and implementation procedures of each EU Member State, commenting on differences and efficiencies within the systems and how planning procedures have affected the implementation of transport projects. In particular, the paper focuses on the implementation of major transport projects – those projects of regional and national significance - and identifies the key requirements for effective planning and development of these large-scale transport developments. The work therefore contributes to the current debate on how best to implement major transport projects.

The objectives of the work were:

- To identify the reason for time differences in planning decisions between the Member States, evaluating the relevant national legislation in force and the different administrative planning procedures and traditions.
- To give examples of good-case transparent, democratically based, efficient planning procedures.
- To identify 'best practices' in operational planning.

This paper reports on a three month scoping study which aimed to identify the key aspects of planning and implementation. The work was therefore carried out as a desk study drawing on national, European and international literature. In addition, to complete the analyses official project websites were used.

2. Planning procedures in EU

2.1. Spatial plans

Although each EU Member State has its own planning system, there is also consistency between Member States concerning the importance of policy and procedural frameworks for managing land use change, and relating this to wider social, economic and environmental objectives. There are therefore some common themes as well as key differences in the planning processes of each Member State. This section provides a brief overview of planning in Europe, comparing and contrasting systems and establishing the general processes used to implement major transport projects.

At the national level all Member State governments have some responsibility for spatial planning, except in the case of Belgium. Austria also has limited responsibilities. However, in Greece central government has sole responsibility and central government involvement is also important in the UK, Ireland and Luxembourg. In Belgium and Austria the regional level plays the primary role. Germany, Spain and Italy also have regions with strong autonomy from central government. The remaining Member States have regional tiers of varying importance to spatial planning. At the local level, local authorities have the primary responsibility of writing local spatial plans which regulate and determine permission for land use change. The exception being Greece, where the planning process is largely centralised [Lalenis and Liogkas, 2002]. In general, planning systems in the EU are increasingly moving from centralised to decentralised systems.

In Member States environmental considerations are becoming an increasingly important part of the decision-making process. In 1985, the EC issued the 'Environmental Impact Directive' (EIA) (85/337/EEC) which resulted in all Member States being obliged to consider the environmental impact of certain development projects (this included major transport projects). A new directive issued in 1997 on Environmental Assessment (EC Directive 97/11/EC) supersedes the original directive from 1985 [EC, 1997b]. The EIA requires developers to compile detailed information about the likely environmental impacts of the development and the public authority makes this information available to the public. An Environmental Statement is publicised and authorities and the public are asked for their views. Following the EIA and the public consultation the planning authority determines the planning application taking account of all the views as well as the local spatial plan. The public is informed of the decision and the reasons behind the decision. [EC, 1997a].

3. Planning and implementation process for major transport projects

A major transport project in most Member States would be subject to the procedure described above - establishing whether a project can be permitted against the spatial plans and going through an EIA and public consultation before being given permission to develop. The following sections summarise the main components of the approval process.

3.1. Initiating major transport projects

In most of the EU countries (with the exception of Greece), national and regional governments adopt sectoral planning documents, spatial development plans or programmes at the national and/or regional levels that provide an important context for decisions on individual projects. In a number of countries a clear national policy related to major infrastructure is seen to be a prerequisite for the approval and subsequent implementation

process of a major transport project. However, this approach is not currently used in all countries to the same extent, e.g. in the UK [EC, 1997a]. In mainland Europe, the initiators of major public infrastructure schemes are generally central government or from infrastructure companies which are either publicly owned (France), semi-public (France and Germany), or a combination of public private partnerships. However in the UK, major transport works are often instigated at the local level.

3.2. Simplifying the decision making process

Some of the Member States make a distinction to some extent between the decision in-principle to proceed with the project and the detailed decisions on precise location, design, etc, through the use of a two-stage decision-making process. The first decision may be related to the national policy framework and be made by the national Parliament. Once permission is granted in-principle at the first stage, the second stage process will be conducted at the local level and be more concerned with design and routing etc. France, Italy and the Netherlands all present clear examples of how this can be done and this is a procedure which the UK is moving towards.

3.3. Special legislation

There is regular use of special legislation in the form of an act or decree in many EU Member States. The UK uses the “hybrid bill” procedure which forms the first stage of a two stage process, making the decision in-principle and leaving the detail to the normal land use planning process (with provision for central intervention if necessary). The statute approving the project will set out the procedure to be followed for detailed approval. This approach is also used in Denmark, Italy, France, Germany and the Netherlands. The frequency of the use of special procedures or special legislation and approvals for major transport projects varies from country to country, although it is generally low.

3.4. Advisory bodies

Advisory bodies are sometimes used to discuss and elaborate proposals for major transport projects particularly at the early stages of a proposal. They serve to ensure a managed debate where many interests can be considered. Such bodies are used in France and Italy. They consider major projects and advise on feasibility and viability, need and other matters. Its conclusions are advisory but an important contribution to the government’s consideration of projects. These bodies help to limit subsequent debate on certain issues at the later stages.

3.5. The land use planning process, consultation, objection, hearings and appeal

The land-use planning process plays a part in approval of major transport projects – either for the whole decision or the second stage decisions. Decisions will normally allow for widespread public consultation on the proposal (but not decisions already made in a first stage, or in countries which have national planning frameworks) and rights to formally object when a detailed proposal is made. The use of environmental impact assessment legislation has also introduced a statutory requirement for public consultation.

In most Member States hearings are used as part of the normal planning procedure, although there may be restrictions on who can object and appeal. Hearings tend to take the form of an open public meeting in which people are allowed to voice their objections after submission in writing (as in Italy and France). Hearings may be time limited for example, in the Netherlands there are limits established under the new *Tracéwet* Act, and in Germany under the *Planfeststellungsverfahren* process, because the delays in considering objections can result in significant time delays in the planning process (see below).

3.6. Review and reform of procedures

Due to the concerns of the length of time taken to plan and implement major transport projects several countries have introduced or proposed new laws in recent years in order to speed up approval procedures for major projects.

Germany

In Germany, infrastructure routes are specified by a single procedure for large public projects called the *Planfeststellungsverfahren* (statutory plan approval procedure) on the basis of the *Verwaltungsverfahrensgesetz* (Federal and state Acts of Administrative Procedures). The Federal Act of Administrative Procedures was amended in 1996 by the *Verkehrswege-Planungs-Beschleunigungsgesetz* (Act for Speeding up Approval Procedures). This Act includes a special approval procedure which has several stages and sets strict time limits for consultation and decision making. This procedure includes public inquiries in municipalities, which are affected by any major transport proposals. In terms of decision-making it replaces the personal notification of objectors (if there are more than 50) by notification through public information in the newspapers.

Netherlands

In the Netherlands the “Tracéwet Act” was implemented to speed up the granting of planning permission for major rail, road and waterway projects. The Act limits public consultation to three stages of the planning process and sets time limits for the three consultation periods. People wishing to object or appeal may not base their objections on items included in previous consultation stages as the opportunity for doing this has already passed.

United Kingdom

In July 2001, the UK government announced a package of measures to speed up planning decisions on major projects in order to minimise delays and uncertainty. In December 2001 the government published a consultation paper concerning the implementation of major transport projects. The proposals in the Government’s consultation paper include:

- statements of Government policy before major transport projects are considered in the planning system;
- a mechanism for deciding which projects are to be treated as major transport projects;
- a new procedure which would give Parliament the opportunity to approve projects in principle prior to consideration of detailed issues at a public inquiry;
- amended public inquiry procedures; and
- reductions in delays at other stages of the process.

It is expected that a revision to the current major transport procedure will be in place, based on the proposals above, when the Planning White Paper is published in 2004.

3.7. Summary of the planning process for major transport projects

It is evident from literature that planning systems in the EU are undergoing continuous change, responding to political, economic and social forces [Marshall, 2002]. A number of major trends were discernible although these tended to be more advanced in Member States with a long history of spatial planning. There is a growing awareness that spatial planning is one component in a much wider variety of issues and transport is increasingly recognised as one issue related to spatial planning. Therefore, a more comprehensive and complex form of spatial planning is evolving, which moves away from purely physical matters of location and land use to a wider concern for social, economic, environmental and political matters. A streamlining of procedures in some member states is also

occurring as well as the decentralisation of responsibilities to the regional and local levels of government [CEC, 1994].

The increased decentralisation of responsibility for planning, particularly for the granting of planning permission or building permits has improved local planning decisions but it can result in delays to the implementation of national planning policies and projects - especially major transport projects that are of national significance. Major transport projects are further complicated due to their size and influence on a large number of local authorities, their significance to countries and regions and their costs. This can result in the planning and decision processes for major transport projects being lengthy and costly [CEC, 1994].

Debate surrounding how to plan and implement major transport projects in the most efficient way is found in all the Member States. There is considerable variation in procedures, reflecting the very different constitutional, legal, cultural and other conditions in each country or region.

Although each EU member state has a different planning procedure there is very little evidence from literature or the case studies outlined in section 4 below that major transport projects are approved quicker under particular planning procedures. Most countries have examples of major delays but there are also examples of particular major schemes proceeding from initial inception to implementation within shorter time periods. The approval of major projects is a controversial issue. The following section shows that each major transport project is unique and therefore many of the circumstances which delay implementation are unique to each project.

4. Case studies of major transport projects

The previous sections have identified that discussion on how to plan and implement major transport projects in the most efficient way is occurring in many Member States. Considerable variation has been noted in the planning procedures, reflecting different constitutional, legal and cultural conditions in each country or region. This section looks at the fourteen case studies of major transport projects listed in Table 1.

Table 1: Major transport project case studies

Countries	Major Transport Project
France	TGV Eastern TGV Méditerranée TGV Lyon-Turin 'La Transalpine' Orléans' Tramway
Germany	High-Speed Train Link: Cologne-Rhine/Main
Greece	Athens Metro Attiki Odos Road – Greece. Egnatia-Odos Highway Rio-Antirrio Bridge – Greece.
Portugal	Vasco de Gama Bridge
UK	Manchester Metrolink Midlands Metro Croydon Tramlink Channel Tunnel Rail Link

Observing the case studies has highlighted key 'factors for success' when implementing major transport projects. However, considering success is difficult when different case studies represent a variety of aspects of success. For example, a planning procedure may be considered successful if it is short or if it is thorough in evaluating impacts of the

development on the environment. However, it is difficult to achieve both these aspects. The following section however provides some guidance on pre-requisite measures which need to be in place to assist with successful decision-making and implementation.

4.1 Issues and barriers relating to implementation of major transport projects

Many issues surround major transport projects, particularly their impact on the environment and the length of time required to obtain constructing permission. Large transport projects often raise questions of sustainability i.e. consideration of the environment, economy, society and equity. An additional problem is that a large project increases the number of stakeholders involved in the planning and implementation, thereby creating a problem of co-ordination. Co-ordination is a problem because there are conflicting or contradictory goals that need to be overcome or balanced in a consistent, transparent and legitimate way to make implementation possible and to achieve the common goal of sustainability.

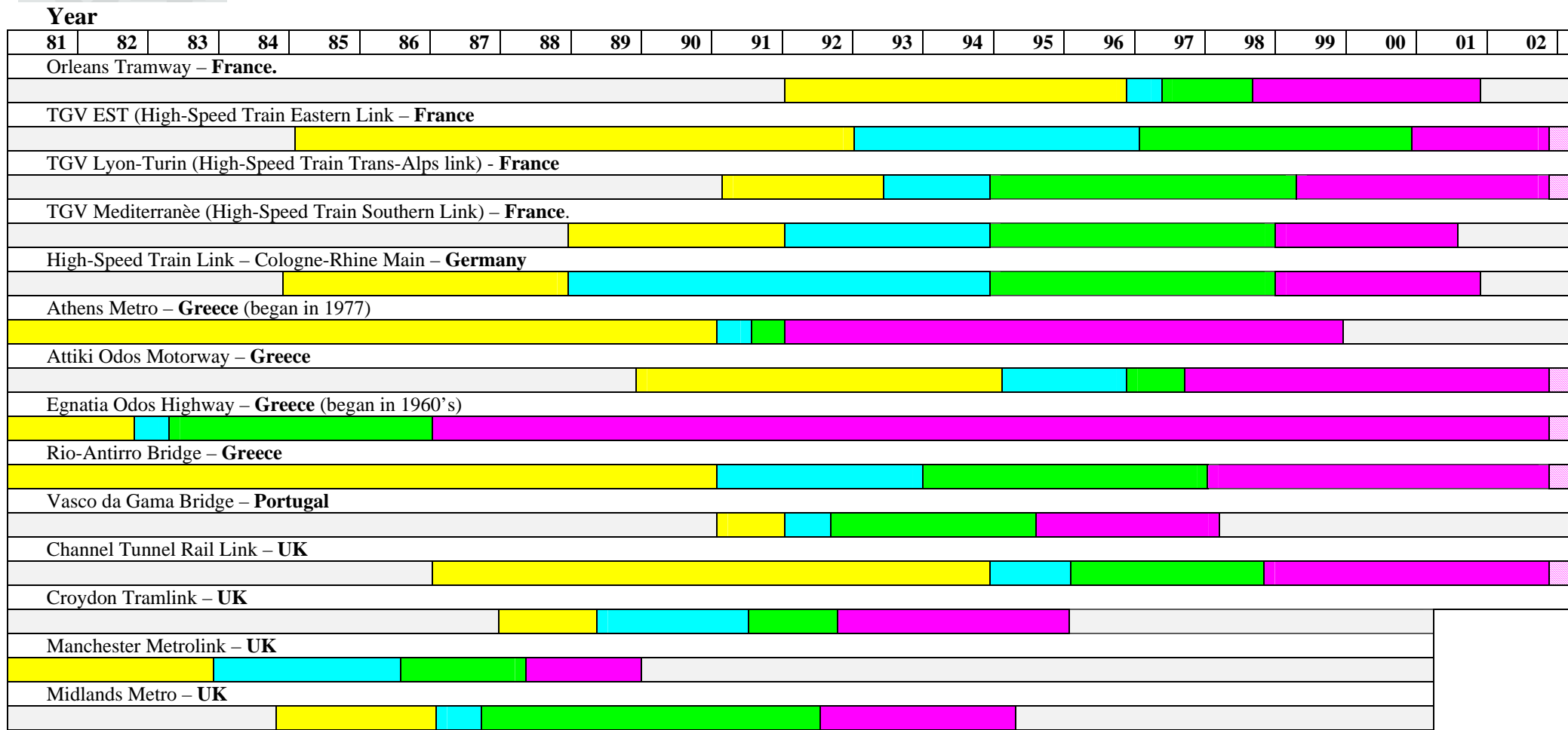
To analyse the case studies the planning and implementation procedure has been divided into four stages; the preliminary planning process, the submission of the proposal to parliament and gaining consent, the period before construction begins (which often includes tendering) and the construction period. The first two components relate to 'Planning' and the final two components relate to 'Implementation'. In this paper, best practice in the planning phase has been defined as that which achieves a thorough environmental appraisal and public support for the project within an efficient timescale. Best practice in the implementation phase has been defined as the development of the project within a short timescale and to a good quality.

Figure 1 shows the differences in time taken to succeed with the planning and implementation of the fourteen major transport projects used in this study. It shows that the length of time taken to complete each stage varies significantly between each case study. The remainder of this section compares the fourteen case studies and identifies 'factors for success' and 'barriers to success' when planning a major transport project.

4.2. The decision making process

Due to the variety of planning processes, each country has its own approach to delivering major transport projects. It is implied therefore that some countries may have a process which ensures faster planning procedures. Figure 2 compares the fourteen case studies by country.

Figure 2 shows that the UK and France appear to have the shortest planning and implementation procedures. Varying time lengths characterise the planning processes of the case studies from Greece – notably due to the length of time taken in the preliminary planning processes. Three of the case studies (*Egnatia-Odos*, *Rio-Antirrio Bridge* and *Athens Metro*) experienced problems due to the environmental considerations of developing such large-scale infrastructures [Mylius, 1999; Haralambidou, 2000]. This is an issue for Greece, particularly considering its heritage. Greece has experienced under-investment in transport compared to other Member States and therefore progress in terms of economic development needs to be balanced with environmental and social considerations. The delays in the planning process appear to be circumstantial rather than process related. There are not enough case studies from Portugal and Germany to form a valid conclusion on this issue.



KEY.

	Preliminary Planning Processes
	Submitting Bill to Parliament/gaining consent
	Period before construction begins/tendering.
	Construction Period
	Proposed Construction Period

Figure 1: Planning Process for European Major Transport Projects – Time Taken.

Constitutionally, the responsibility of the final decision to construct the infrastructure lies with the national government. Generally, a top-down process is favoured where the project is instigated by the national government. This is the procedure adopted in the case studies of *Cologne-Rhine (Germany)*, *Vasco da Gama (Portugal)* [Joanaz de Melo, 2000] and *TGV (France)* [Giorgi and Pohoryles, 1999]. In the case of *Cologne-Rhine* the planning and implementation process took 17 years compared with only 7 years for the *Vasco da Gama*. In contrast, the *Croydon Tramlink* was implemented in 10 years and was instigated by the local authority [Anderson, 2000].

The planning approach taken by each country and case study will affect the co-ordination and decision making process. However, there is not strong enough evidence from figure 2 to suggest that one process is more efficient than another. Other factors are also influential in speeding up or delaying the process.

4.3. Environmental appraisal and public participation

Environmental appraisal is part of all decision processes concerning major transport infrastructure. Environmental appraisal raises the involvement of the public. The arguments for and against environmental assessment often rest on the costs incurred of such studies. Again, the *Vasco de Gama* and *Cologne-Rhine* case studies highlight interesting factors. The planning procedure for the *Vasco de Gama* did not thoroughly consider the environment or public opinion and therefore the construction of the bridge was unpopular, but the implementation process fast. The *Cologne-Rhine* case study involved thorough feasibility and environmental studies which highlighted nature conservation and geological issues. Although this resulted in a more acceptable development the delay increased the costs of the project [Joanaz de Melo, 2000].

4.4. Financing

Financing is a very major problem for all major transport projects. The EU in 1997 advocated the consideration of public-private partnerships as a solution. However, these are difficult to implement when the costs for major transport projects are high and risky. Another way to overcome financial barriers is to divide the project into sections – although this can incur time delays and additional costs as experienced with the *Channel Tunnel Rail Link (UK)* [Cordner, 2001].

Several case studies show a very short period between gaining consent to develop and beginning construction (see Figure 2). On further investigation, it is possible that this is due to the different design, build, finance and operate arrangements. The *Midlands Metro* case study highlights the time that can be taken when a scheme is reliant on government funding. Whereas the case study of *Croydon* highlighted that the time usually spent persuading the Government to finance the scheme was minimised by using the Private Finance Initiative. These private companies were also keen to get the system into operation so as to recoup some of the funding already given. Case studies in Greece such as *Athens Metro* and *Attiki Odos Ringroad* show short planning schedules up to implementation [Haralambidou, 2000]. This may be due to the private companies which build and operate these systems wanting to quickly recoup some of their costs. In comparison with other countries, France and Germany appear to take longer (especially in relation to the other phases of the planning process) than other EU Member States and this could be due to the public sector funding. However, caution is needed with these assumptions as the *Midland Metro* case study was further delayed when difficulties arose with the private companies involved in the initial design, build and operate consortium. This slowed the implementation process and resulted in a second consortium being awarded the contract.

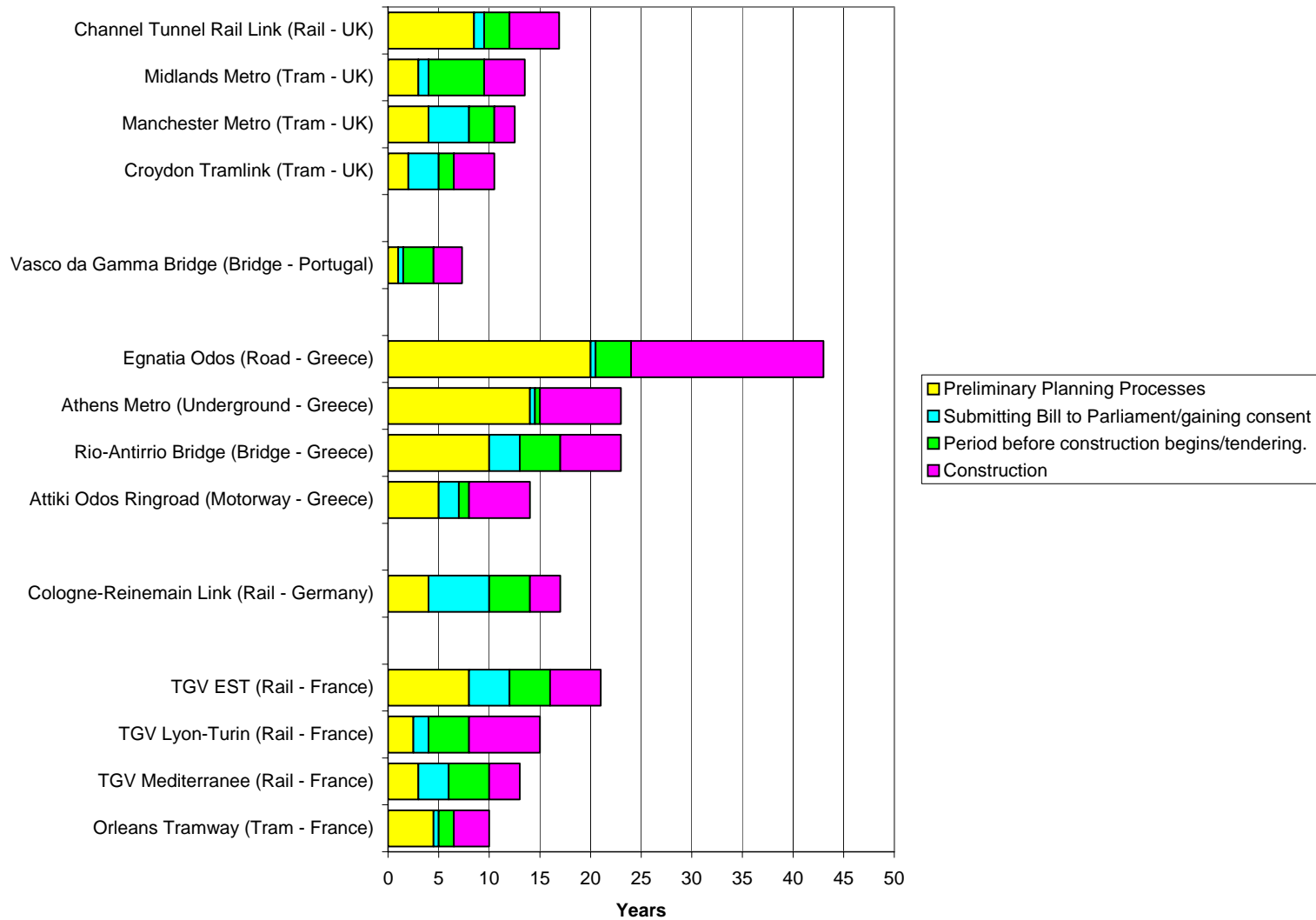


Figure 2: Length of the planning procedures of major transport projects by country

4.5. The size of the project

Major transport projects can vary in size and scale of significance (regional to European influence). The relatively smaller projects studied take less time to progress through the planning procedure and implement (*Orleans, Croydon Tramlink, Midlands Metro, Manchester Metrolink*) [Crozel, 2000; Anderson, 2000; Symons and Johnston, 2000]. This is because there are fewer organisations and individuals to co-ordinate and gain agreement, less impact on the environment and fewer financing issues. Figure 3 provides an analysis of planning processes by mode.

Figure 3 shows that the length of planning procedures may be influenced by mode and size of project. Although accurate costs of projects could not be collected within the timescale of the research this figure gives an indication of how size and cost of project affects the planning and implementation. Tram projects tend to be smaller in scale to rail projects and the rail projects have a longer planning duration than trams. In addition, the graph also shows the length of time taken to plan the TGV Eastern and TGV Lyon-Turin. These projects were complex and required long contract negotiations due to the links with neighbouring countries [Giorgi and Pohoryles, 1999]. In the European context, major transport projects can increasingly involve several countries in implementation. When two or more countries are involved new levels of co-ordination and agreement are required. Often international agreements are signed although these are not binding with regard to a time framework and are largely symbolic - acknowledging co-operation between national governments. In addition, borders can be seen as frontiers. Although crossing borders can be an opportunity to transfer ideas and encourage economic development, borders can also be an obstacle which has to be overcome through expensive solutions (as in the case of the Channel Tunnel) [Cordner, 2001].

4.6. The influence of personality

The need for co-ordination has emerged as a major issue in the implementation of major transport projects – particularly as different levels of government, different countries and a large number of stakeholders are increasingly involved. All views must be considered – even if they are opposing. Conflicts are common in the field of transport and are evident at all levels from transport policy development to implementation. The resolution of these conflicts and the co-ordination of the many interests and stakeholders requires mediation. The role of mediation can lead to the emergence of a principal agent being central to the success of a decision making process. These personalities are often difficult to identify but aid the smooth running of the process. An example of such a personality is Louis Besson (*Lyon-Turin* case study) [Giorgi and Pohoryles, 1999].

In addition, personalities can also shape the decision making procedure with their influence. This has been highlighted in the case of *Vasco de Gama* where the Minister of Public Works was keen to complete construction of the bridge in time for the Expo exhibition [Joanaz de Melo, 2000].

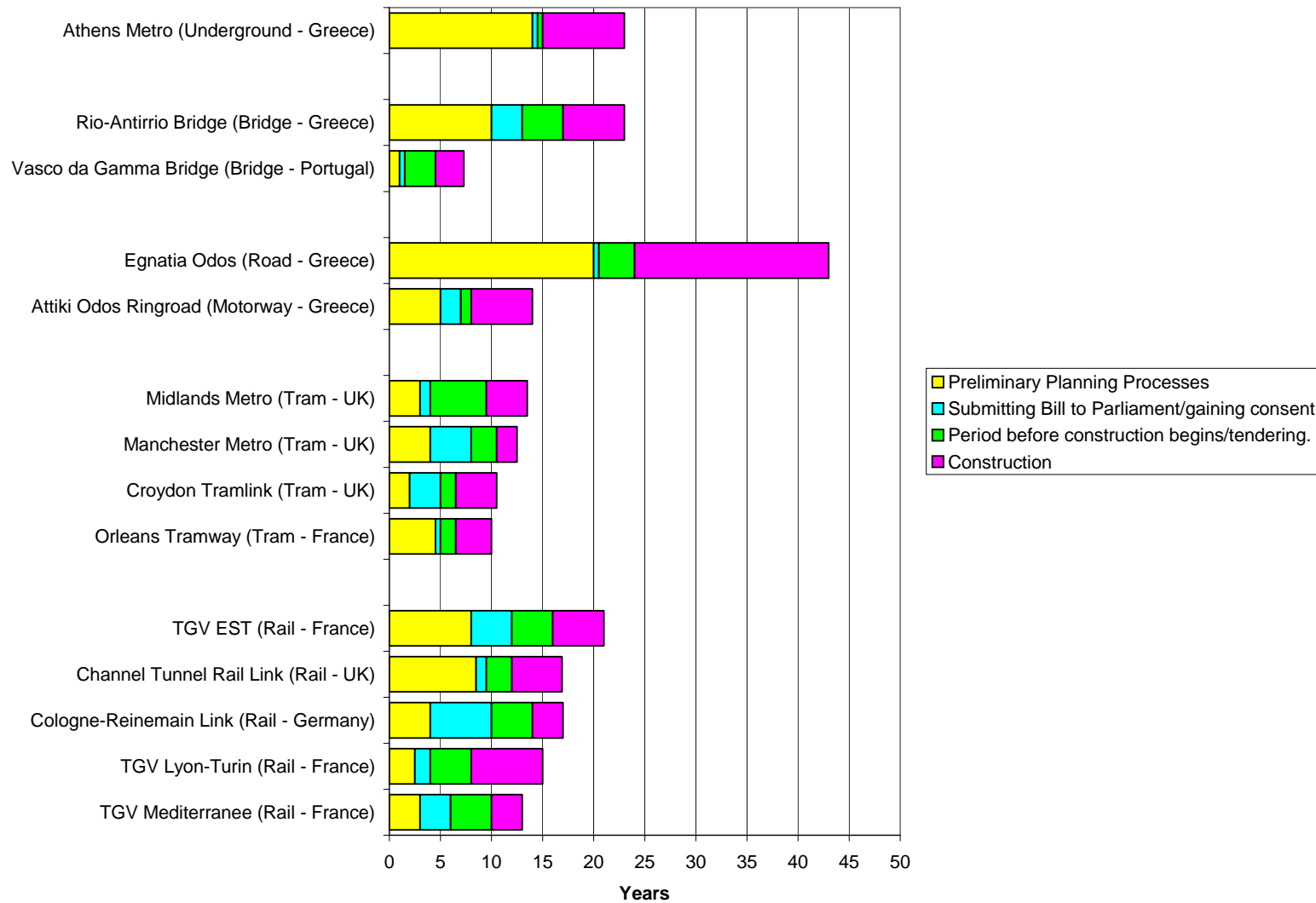


Figure 3: Length of European Major Transport Projects Planning and Construction Process by Mode Type.

4.7. An emerging trend?

A variety of factors therefore affect the planning of major transport projects. Although ‘factors for success’ can be identified, so far no key process has shown to be more efficient than another. It is evident however, from the literature and case studies, that planning systems in the EU are undergoing continuous change, responding to political, economic, social or ideological forces. It is now acknowledged that transport and land-use planning is part of a complex web of policy-making and that this complexity although leading to some time delays and increased costs to projects results in better and more sustainable developments. A new focus has therefore emerged which considers sustainability objectives but also encourages efficiency in the implementation of these projects.

Figure 4 shows the major transport projects used as case studies in this paper in chronological order from the year planning commenced up to, but not including, construction. The projects planned since the 1960’s to mid-1980’s generally have longer planning processes compared to those projects planned since the mid-1980’s. Often, older projects were plan-led rather than development-led, resulting in projects being investigated but not taken forward until funding available or political will was strong. Although there will be anomalies to this trend, the graph shows that planners are becoming more focussed on delivery, possibly due to the availability of funding, involvement of the public, involvement of the private sector and the drive for sustainable infrastructure.

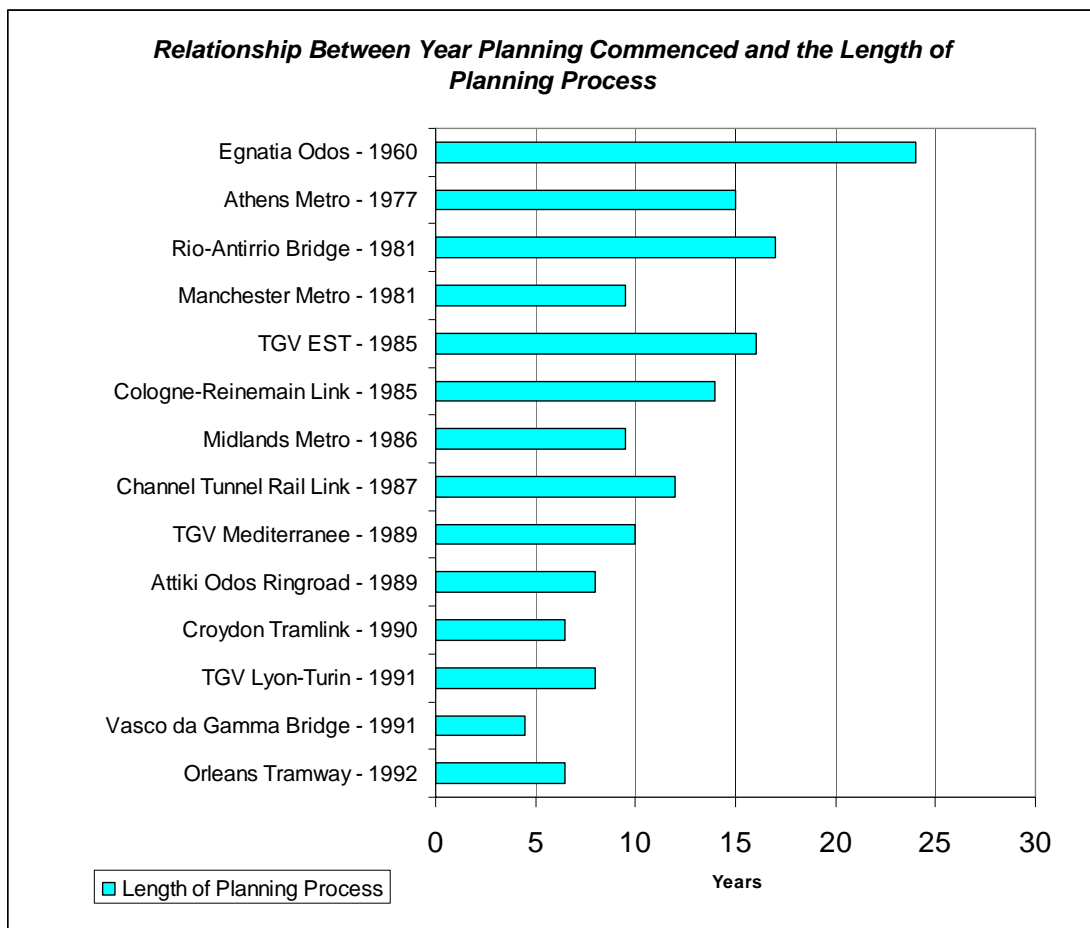


Figure 4: The year planning commenced and the length of the planning process

5. Conclusions: A best practice approach to implementing major transport projects

There is a package of pre-requisite measures which must be in place at the beginning of the project if best practice is to be achieved. These measures include *political will and drive*, a key actor with good *project management and mediation skills*, and *financing*. If any of these measures are omitted and have to be brought in during the planning process then time costs are incurred. In addition, an *event driver*, such as the Expo '98 or a major sporting event, will also assist in delivering the project – although these drivers can result in the environmental and social issues being sidelined in favour of other priority objectives.

There are two distinct phases evident when implementing and major transport project. As discussed earlier, figure 1 split the planning and implementation procedure into four components; the preliminary planning process, the submission of the proposal to parliament and gaining consent, the period before construction begins (which often includes tendering) and the construction period. The first two components relate to 'Planning' and the final two components relate to 'Implementation'. No single country or case study has been identified which carries out best practice in all four components but some case studies highlight best practice within the separate components. Therefore, a best practice approach has been developed through the lessons learnt from different case studies.

Figure 5 outlines the key factors required for achieving effective planning and implementation of major transport projects. The conclusions that have been drawn from the literature review and case study analysis show that without these inputs the planning and implementation process is weakened.

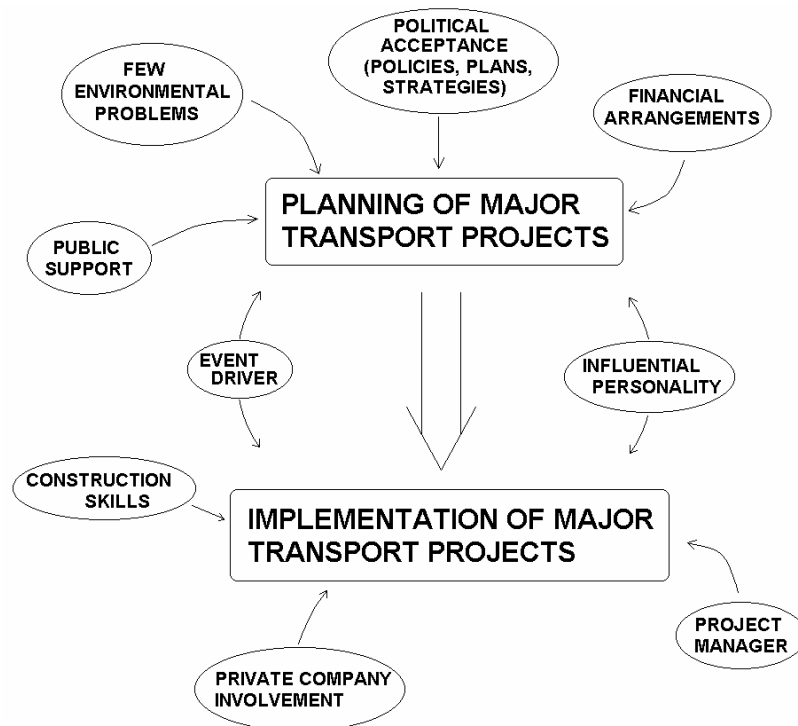


Figure 5: Key factors to success for effective planning and implementation of a major transport project

Planning Phase

This study defined best practice in the planning phase as ‘a phase that achieves a thorough environmental appraisal and public support for the project within an efficient

timescale'. Figure 5 shows that there are a number of factors to success which need to be present in the planning phase to assist in the smooth running of the whole procedure. Most countries in the EU operate a top-down approach where major transport projects are part of national plans. This helps to ensure *political acceptance* is in place at the start of the project. This occurred with the case studies in France and Germany. However, political will is not the only requirement. The Greek case studies show that this phase of the planning process is often lengthy. This would appear to be because, although political will is strong, the means to implement the project – such as *financial arrangements, environmental circumstances, construction skills* and *political drive* – are not always available to drive the project forward.

In addition, a strong top-down approach does not always generate *public support* for the proposals. The approach adopted by Croydon Tramlink meant that the public was consulted about their preferences for solving the transport problems in Croydon. 80% of those consulted supported the tram. This level of support ensured less public opposition and therefore fewer delays throughout the planning process. Croydon had also arranged the *finance* for the project and although the Tramlink was compatible with the UK government's transport policy the use of private finance meant that Croydon did not have to persuade the government to provide funding.

This phase can include environmental impact assessment, public consultation and public inquiries. In general, the more complex the project the longer this phase can take as it is this stage which will highlight environmental difficulties and differences in opinion of stakeholders (Cologne-Reinmain and Egnatia Odos, Channel Tunnel Rail Link). However, if there is *political will* and *public support* and few environmental difficulties, then this phase can be efficient in terms of time. The Croydon Tramlink completed the planning phase in 5 years, including a *thorough environmental assessment*. This can be contributed to the public support Croydon received from the inception of the project.

Therefore, to achieve best practice during the planning phase the key factors which need to be present are *political will and drive, public support* and *financial arrangements*. Absence of any of these factors can result in delays within the planning phase or subsequent implementation phase.

Implementation Phase

This study defined best practice in the implementation phase as 'the development of the project within a short timescale and to a good quality'. Figure 5 summarises the pre-requisites for achieving effective implementation. Case studies that have achieved successful implementation often involved *private companies* although the time taken to construct a project depends on the size of the project. Many of the projects such as Athens Metro, Croydon Tramlink and Manchester Metrolink have short lead in times between gaining consent and beginning construction which can bring forward the completion of a project by several years. This is because financing of the project was already established before consent was given and because these private companies were keen to get the system into operation to recoup some of the funding already given. In comparison other case studies in France and Germany took longer to begin construction and this could be due to the provision of public sector funding. However, caution is needed as the Midland Metro case study showed that difficulties and delays can also arise when private companies are involved in the design and construction process.

This paper has highlighted the difficulties of identifying best practice when planning and implementing major transport projects – particularly with regard to the balance between economic, social and environmental costs. However, the process has improved in recent years and current decision making planning now take account of social and environmental costs as well as economic costs. In effect a decision-making process which

is fast and cost effective cannot in itself be considered best practice if other social and environmental costs are incurred. Nevertheless, evidence suggests that there is increasing awareness of the need to plan and deliver major transport projects with due consideration to economic, environmental and social issues. This has resulted in the development of procedures and roles which aim to increase efficiency in delivery.

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