
Construction Economics and Management

MSc Report

**DELIVERING THE PPP PROMISE IN GREECE:
CURRENT SITUATION and LESSONS LEARNED
FROM THE INTERNATIONAL EXPERIENCE**

By

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of Master of Science in Built Environment from the University of London**



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ABSTRACT

Public-Private Partnerships (PPP) constitute an alternative method of procuring infrastructure projects. They include the cooperation of the public and private sectors for the provision of assets and services. The idea behind this kind of partnerships is old (France in the 19th century), however, in modern times it was introduced in the UK (1992) under the term Private Finance Initiative (PFI). Since then, and after 15 years of experience and evolution, many countries around the globe have adopted PPPs for projects and services in numerous public sectors, that include: transport, health, education, waste treatment, prisons, defence.

In the light of these events, Greece has decided recently (2005) to launch a PPP program with a new legislation, in order to promote PPPs in the Greek market. Until now, only 3 transport projects (Attiki Odos, Rio-Antirio Bridge, International Airport of Athens) were procured as PPPs in Greece, however the “steps” of the Greek economy, during the last 15 years, were towards the participation of private funds in the operation of the state. Moreover, the contribution of the European Union with the Community Support Frameworks (CSF I,II,III 1989-2006) was, and still is, fundamental for the increase of public spending. Thus, we can conclude that the conditions for the development of PPPs, at this specific time, are more than propitious.

This report will attempt to evaluate this effort of the Greek state, by examining the history and the present of PPPs in Greece and by using guidelines from the international experience and practice.

This provides a basis for future research to examine the success or failure of this method, after the first series of such projects are complete.

Key words: PPP, private finance, Greek legislation, public services, infrastructure, procurement

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KEY ABBREVIATIONS

CSF: Community Support Framework

EC: European Community

EIB: European Investment Bank

EU: European Union

NAO: National Audit Office

NPM: New Public Management

OSB: Organisation of School Buildings

PFI: Private Finance Initiative

PPI: Program of Public Investment

PPP: Public Private Partnership

SPV: Special Purpose Vehicle

SS: Special Secretariat for PPPs of the Greek Ministry of Finance and Economy

TCG: Technical Chamber of Greece

TENs: Trans-European Networks

CHAPTER 1

INTRODUCTION

1.1 Statement of research problem

In order to bridge the growing gap between the cost of the infrastructure needed and the resources available, and to ensure that the infrastructure is delivered as efficiently and cost effectively as possible, the key question is *how to deliver cost-efficient investment*. In this context, Public Private Partnerships “PPPs” are a growing element of public sector procurement across Europe.

According to the National Audit Office (NAO, 2005), “PPP is a formal agreement between a public sector client and one or more private sector companies to deliver a service or services”.

PPP procurement is only one of several options for procuring infrastructure and the principal reason for using them is that, where the project is suitable, they can deliver better value for money than the alternatives. Thus, the PPP approach is increasingly being adopted to deliver new investment in infrastructure. Many countries, including Greece, initially develop PPPs in the transport sector and later extend their use to other sectors, such as education, health, energy, water and waste treatment, once the value for money benefits are proven and public sector expertise is established. However, the use of PPPs raises a number of complex issues and choices, the solutions to which are often project or country specific. Therefore the specific question for this study is:

How do Public Private Partnerships, “PPPs”, contribute to the delivery of cost-efficient investment for Greece?

The subject of PPPs was chosen as a topic for this report, because according to the personal opinion of the author, PPPs are at the moment the most important issue of construction economics in Greece.

The initial intention was to focus on a specific part of PPPs in Greece (e.g. the construction and operations of motorways), by examining the public-private

cooperation and the possible problems or issues that would come up in this specific field. However, the first stages of the research revealed that the most important issue at present in Greece is not something specific, but the general management and operation of PPPs (procedure issues): legislation, process of implementation, completion of concession contracts, control over the construction and the operation. This arises from the fact that even though during the past decade in Greece PPPs were always in the agenda of the Greek governments, they did not constitute, until the end of 2005, an official alternative method for the procurement of public services, due to political and other circumstances (e.g. Olympic Games 2004) that postponed their evolution. As a result PPPs in Greece are currently in their “infancy” and the lack of experience and some ignorance are evident both in the public authorities and in the vast majority of private firms. Thus, the main concerns of the market are about the total of the procedure and not about a specific part of it.

1.2 Aims and objectives of the research

The main *aim* of the study is to address how PPPs contribute to the delivery of cost-efficient investment for Greece? In order to address this aim a series of issues need consideration. Therefore *objectives* of this report are:

- to examine if lessons from the international experience about PPPs were adopted and followed in the formation of the Greek PPP program
- to examine which services and projects are designed to be procured as PPPs
- to examine the actions of the Greek government towards the completion of the PPP program

The expected outcomes of this report will be:

1. to identify possible omissions and problematic stages of the PPP procedure and present specific solutions

2. to identify the level of completeness of the Greek PPP procedure compared to other countries
3. to identify which sectors and projects are suitable PPPs for Greece and have the greatest possibility to lead to successful partnerships

1.3 Research methodology

The methodology adopted to undertake this report is extensively analyzed in chapter three.

1.4 Report structure

This study contains six chapters including this introductory chapter. This chapter provides an introduction to the content and structure of the thesis.

Chapter two contains a review of the relevant literature related to PPPs. By focusing on relevant published literature, the chapter is identifying and explaining the main relevant issues, problems and concerns. It draws upon international and national research concerning PPPs, evaluating the relevance to the Greek context in terms their characteristics, their advantages and their disadvantages, and how they differ from the traditional public procurement methods. It concludes with an historic review of PPPs in Greece, which includes the evolution of the participation of private funding in the provision of public projects and services through the last 20 years. It describes how the Community Support Frameworks (CSF) I, II and III acted like the main means for this development and presents briefly the projects that were constructed with the PPP approach during this period and what kind of projects are expected to be procured in the future.

Chapter three makes a substantial analysis to the methodology adopted for the purposes of this report. The selection of specific research methods is justified and all actions undertaken for the execution of this research are analyzed.

Chapter four is about the legislation concerning PPPs. The first part is about the EU legislation (Green Paper) that aspires to provide general guidance for the subject to all the countries-members, while the second part examines the

new Greek legislation for PPPs. The fundamental points of the new law are presented here, so that a comparison with other countries can be made. The chapter finishes with a set of criticisms on the new law that is accompanied with a list of proposed amendments. Some criticisms and proposals are based on the opinions of the Technical Chamber of Greece (TCG).

Chapter five analyses the primary data collected from the conduction of the interviews, combines them with the secondary data collected from the research and attempts to evaluate the progress of PPPs in Greece, at this initial stage.

Chapter six draws on the main conclusions emerging from this research and provides recommendations for the improvement of the PPP procedure. The chapter identifies areas where further research in this subject field could be directed.

This dissertation intends to constitute an analysis for PPPs in Greece, which can be used to help guide PPP policy and practice in Greece. It includes information that could help a firm (international or Greek) or an individual to form a more complete image about the situation. With its contribution an interested part should be closer to reach a decision of whether to participate or not in the Greek PPP program, and then search for more detailed and focused information according to his intentions and plans.

CHAPTER 2

LITERATURE REVIEW

2.1 The Concept of PPP

2.1.1 What is PPP?

The term “public-private partnership” (“PPP”) has been in general use since the 1990s. However, there is no widely agreed, single definition or model of a PPP. The term “PPP” covers a range of different structures where the private sector delivers a public project or service. Concession-based transport and utilities projects have existed in EU member countries for many years, particularly in France, Italy and Spain, with revenues derived from payments by end-users, e.g. road tolls. The UK’s Private Finance Initiative (“PFI”) expanded this concept to a broader range of public infrastructure and combined it with the introduction of services being paid for by the public sector rather than the end-users. The use of PPPs has now spread to most EU member countries and depending on the country and the politics of the time, the term can cover a spectrum of models. These range from relatively short term management contracts (with little or no capital expenditure) through concession contracts (which may encompass the design and build of substantial capital assets along with the provision of a range of services and the financing of the entire construction and operation), to joint ventures and partial privatisations where there is a sharing of ownership between the public and private sectors (PriceWaterhouseCoopers, May 2004).

At present, the EU does not have an official definition of a PPP. The Commission’s 2004 Green Paper on Public-Private Partnerships referred to PPPs as “forms of cooperation between the public and private sectors for the funding, construction, renovation, management or maintenance of an infrastructure or the provision of a service” (EU Green Paper, 2004).

Box 1 PPP Definitions

PPPs are aimed at increasing the efficiency of infrastructure projects by means of a long-term collaboration between the public sector and private business. A holistic approach which extends over the entire lifecycle is important here.

Source: German PPP Task Force, German Transport, Construction and Housing Ministry (Bundesministerium für Verkehr, Bauen und Wohnen)

The term public-private partnership ("PPP") is not defined at Community level. In general, the term refers to forms of cooperation between public authorities and the world of business which aim to ensure the funding, construction, renovation, management and maintenance of an infrastructure of the provision of a service.

Source: Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions presented by the European Commission, April 2004

Standard & Poor's definition of a PPP is any medium-to-long term relationship between the public and private sectors, involving the sharing of risks and rewards of multisector skills, expertise and finance to deliver desired policy outcomes.

Source: Standard & Poor's PPP Credit Survey 2005

PPPs are long-term partnerships to deliver assets and services underpinning public services and community outcomes. Optimal structuring links private sector profitability to sustained performance over the long-term, yielding robust and attractive cash-flows for investors in return for delivering better value for money to the taxpayer.

Source: John Laing plc

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

Source: European Investment Bank, The EIB's role in Public-Private Partnerships, July 2004

Table 1: PPP Definitions (Source PWC)

Some countries, which claim to have PPP projects, are merely using the private sector to deliver certain functions in a rather limited way. Whilst technically falling under the broadest definition of PPP these schemes do not enable the full range of benefits to be achieved. These full benefits can only be enjoyed by having a structured programme driven by the desire to promote efficiency, value for money and by putting the needs of the citizen first (S.Harris, 2004).

2.1.2 Traditional Public Procurement VS PPP

The 'infrastructure gap', and its negative impact on economic growth, job creation and social cohesion in Europe, has been recognized for many years. Across Europe, the need to improve infrastructure particularly in the transport sector, is seen as a necessary condition to successful economic growth. However, governments have limited financial resources to devote to

increased capital expenditure and improving public services and face restrictions on their ability to raise debt, in particular due to adherence to the principles of economic convergence and fiscal restraint enshrined in the Maastricht Treaty (PriceWaterhouseCoopers, November 2005).

But while public sector bodies across Europe increasingly choose to adopt some form of PPP to develop transport infrastructure, conventional procurement models are still important and may be more appropriate for many projects. Even in the UK, where there is significant recourse to PPPs, 85% of public investment is delivered through conventional forms of procurement (HM Treasury, 2003).

It is therefore important to understand the traditional public procurement approach in contrast to the PPP model. While there is no universal definition of traditional procurement, characteristics that frequently are in evidence include:

- The public sector procures assets, not services, from the private sector.
- Assets are input-specified; the public sector carries out design prior to procurement.
- The private sector is responsible for delivering assets, not for their long-term performance beyond standard warranty periods.
- The project management of procurement typically remains with the public sector, including the risk of successfully integrating multiple works contracts.

Not all the above characteristics will be evident on every project, but a number will typically be present. Overall, the key contrast between PPPs and traditional procurement is that with PPPs the private sector returns are linked to service outcomes and performance of the asset over the contract life. The private sector service provider is responsible not just for asset delivery, but also for the overall project management, the implementation and the successful operation for several years thereafter. The timing of payments by the public sector to the private sector for the assets and services delivered is therefore dramatically different, as illustrated in Figure 1 (PriceWaterhouseCoopers, November 2005).

2.1.2 Characteristics of PPPs (Source: PWC)

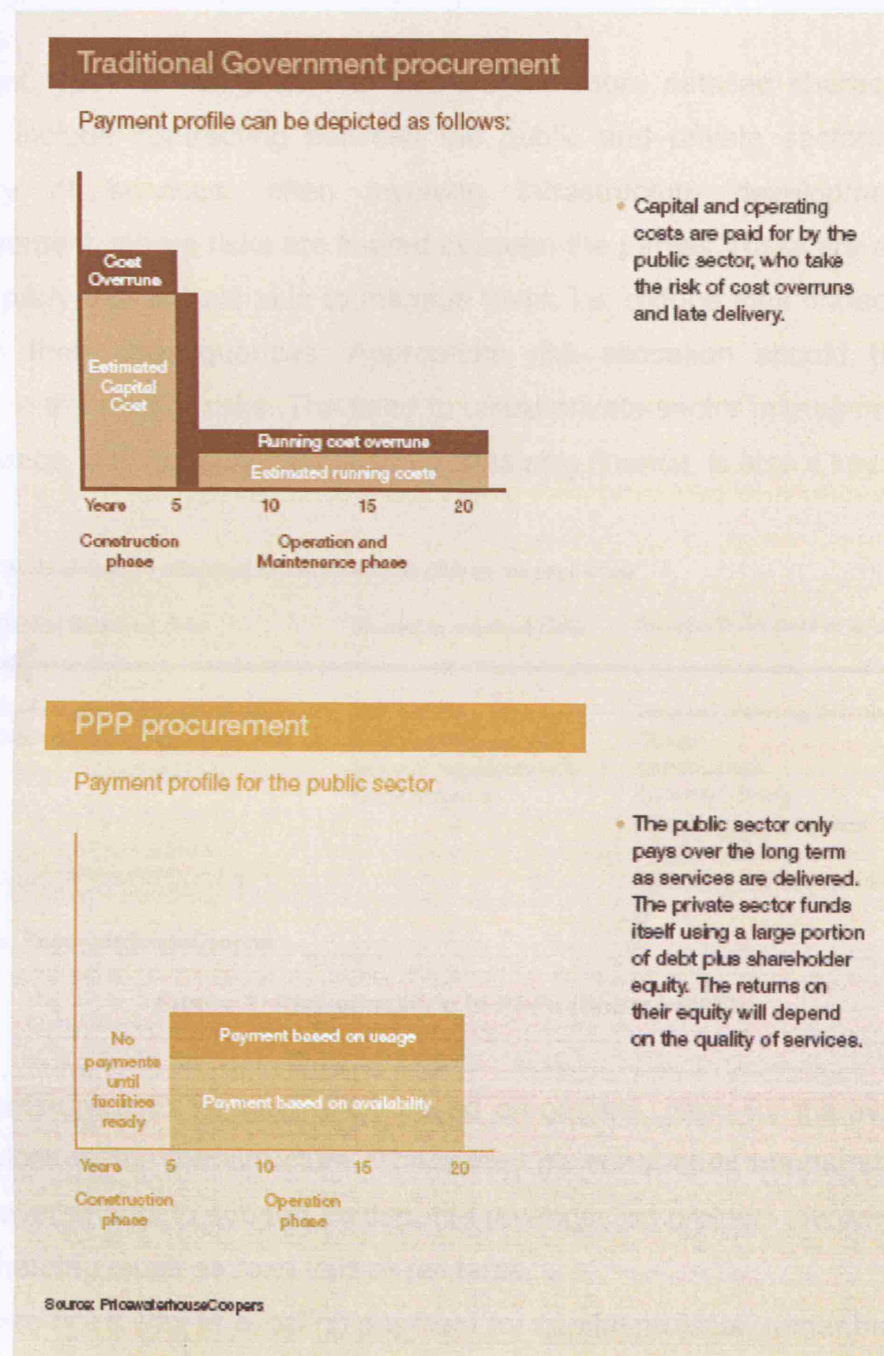
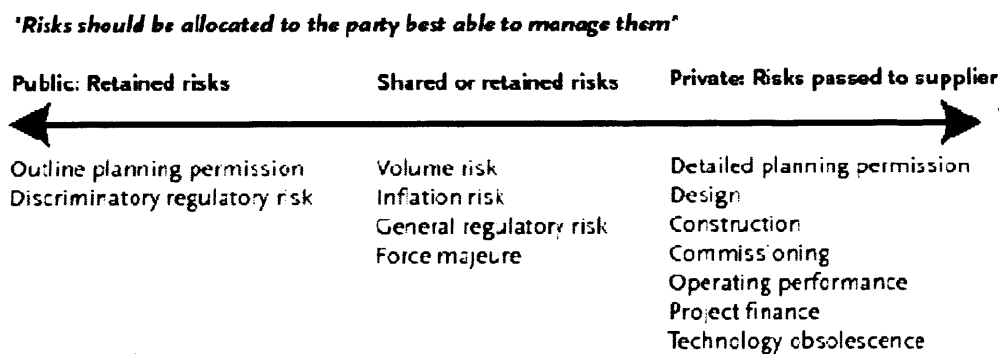


Figure 1: Traditional vs PPP procurement (Source PWC)

2.1.3 Characteristics of PPPs (Source: PWC)

Different types of PPPs tend to share some more detailed characteristics. These include contracting between the public and private sectors for the delivery of services, often involving infrastructure development and management, where risks are shared between the parties. Risks are allocated to the party that is best able to manage them, i.e. reduce their impact and/or absorb their consequences. Appropriate risk allocation should therefore minimize the cost of risks. The need to utilize private sector management and experience, and not only the capability of raising finance, is also a key.

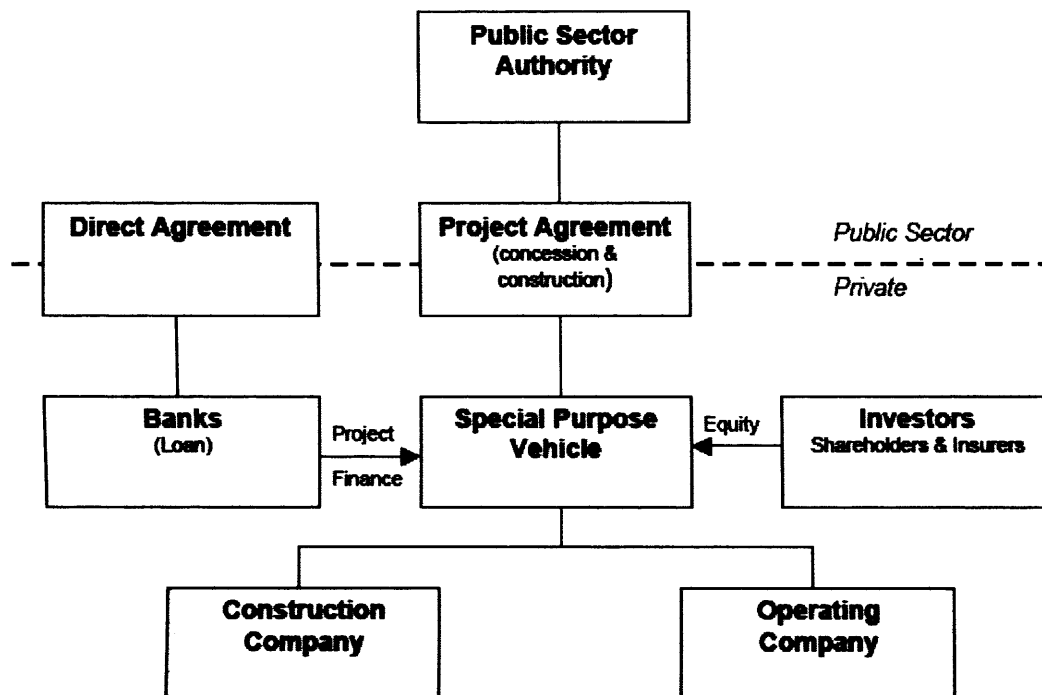


Source: PricewaterhouseCoopers

Figure 2: Risk allocation in PPPs (Source PWC)

Payments under PPPs tend to be based on outputs, often for the availability of services or the infrastructure. There may be contractual annual payments from governments to support inadequate revenues on projects involving direct user charging, such as road tolls or rail fares.

PPPs are not a way of avoiding payment for capital projects; rather they allow public sector bodies to spread payments for large projects over their useful life, usually over 20 to 30 years, but they differ from debt obligations as payment is only made when services are delivered. More than this – it shifts payments from capital accounts to expenditure accounts – from investment to cashflow management – which from an elected government viewpoint postpones responsibility for much of the payments.

TYPICAL PPP PROJECT STRUCTURE

Source: PricewaterhouseCoopers

Figure 3: Typical PPP project structure (Source PWC)

The Commission's Green Paper considers PPP projects to be characterized by:

- Relatively long relationships (Market relationships through procurement and hence governance, as most governments don't provide guidance upon managing the relationships organisationally), involving cooperation between the public partner and the private partner on different aspects of a planned project.
- Funding structures that combine private and public funds.
- The operator playing an important role at each stage in the project (design, completion, implementation, funding).
- The public partner concentrating on defining the objectives to be attained.
- The distribution of risks between the public sector partner and the private sector partner.

Similarly, for the purpose of a recent evaluation report on projects financed by the EIB (EIB, 2005), the evaluators agreed a set of PPP characteristics with the EIB's operational directorates, namely, a PPP should:

- Involve a clearly defined project. The introduction of PPP in the provision of public services has triggered a different approach in the performance measurement of these projects. Now the focus is on outcomes and not inputs or outputs, since the government is involved in a contract of usually 25-30 years, where the construction phase (output) is only the 10% of the project and the service (outcome) is the other 90%.
- Involve the sharing of risks with the private sector.
- Be based on a contractual relationship that is limited in time.
- Have a clear separation between the public sector and the borrower, i.e. there should be a private-sector party raising project-finance based debt.

2.1.4 Advantages of PPPs (Source: Bing Li et al, PWC and S. Harris)

✓ PPPs MAKE PROJECTS AFFORDABLE

Under PPPs, the private sector finances the construction of the project and is repaid by a service charge from the authority over time or by revenues from the project, or a combination of the two. So in circumstances when the public authority does not want to, or cannot, increase its direct levels of borrowing, PPPs make projects affordable. (PWC)

✓ PPPs MAXIMISE THE USE OF PRIVATE SECTOR SKILLS

Under traditional procurement, the private sector is responsible for delivering an asset to time and budget. In contrast, PPPs require the private sector to:

- Deliver assets on time and budget.
- Ensure that those assets deliver the service levels required by the public sector.
- Manage the overall delivery of the project.

- Ensure that the individual assets and other elements of the project that have been procured work together to successfully deliver services.
 - Maintain and refurbish assets on an effective basis, so that services are delivered continuously at satisfactory levels over the long-term.
- (PWC and Bing Li et al)

✓ UNDER PPPs, THE PRIVATE SECTOR TAKES LIFE COST RISK

PPPs require the private sector to compete to deliver services over the long-term at the most economically advantageous price. With PPPs, the public sector is looking to achieve the best value over the life of the asset and project.

As a result, the private sector focus has been to design and implement projects with a view to their long-term cost to the taxpayer rather than the immediate capital spend. Where PPPs have been used extensively, there is considerable evidence of increasing skills in the private sector to analyze and provide for life cycle costs and to design accordingly. (PWC and S. Harris)

However, this stands mainly for the private sector in terms of the market, but not necessarily for individual organisations, as SPV members or even whole SPVs may sell their PPP equity to other companies during the contract lifetime.

✓ WITH PPPs, RISKS ARE ALLOCATED TO THE PARTY BEST ABLE TO MANAGE OR ABSORB EACH PARTICULAR RISK (Figure 2, page 9)

Where the private sector bodies have the necessary long-term project skills and the public sector does not, it follows that the risks associated with project delivery should be transferred to the private sector. In so doing, the public sector should obtain best value because those with the greatest and most relevant expertise will be best able to manage or absorb the risks, thereby pricing them more economically and minimizing the costs. (PWC and Bing Li et al)

Thus for each PPP, risk allocation is fundamental in order to achieve VFM. Usually the risks that the public sector bears are financing and administrative, whereas the private sector bears construction, operation and maintenance risks. But clearly this allocation depends on the particularities of each project.

✓ PPPs DELIVER BUDGETARY CERTAINTY

At the financial close of a transaction, the future cost of a PPP project is known; the public sector will receive known outputs for known costs. This is in contrast to traditional procurement where the costs of project completion and future maintenance of the assets are uncertain and remain the responsibility of the public sector. (PWC and S. Harris)

✓ PPPs DELIVER VALUE FOR MONEY

This is usually the principal justification for a PPP route. The role of the private sector is to provide the public services required. In doing so, it should maximise the utilisation of innovative design, the best construction methods and materials with quality control, together with the latest most up-to-date efficient operating systems and the best maintenance support, with the lowest life cycle costs. The objective is to provide a public service that is “value for money”. In other words, a more efficient, lower cost, reliable public service, than that of a comparable public service by the public sector. (PWC and S. Harris)

In this point, we have to highlight a paradox that may occur in PPP projects and this is that in trying to achieve VFM through the transference of risks to consortia, actual VFM may deteriorate. It is an important fact to bear in mind that the private sector borrows at 6-9% above gilt rates, and hence the private sector must more than make up for this in efficiency gains if VFM and profitability are to be achieved. As the risk transfer increases, the greater is the level of risk that is borne by the consortium. This means that a greater amount of equity required, as banks would be less willing to finance such deals. Hence, higher equity means higher financing costs. As taxpayers will pay the project in the long run, there is an argument that VFM may not be achieved and the public sector will pick up the burden (Merna and Njiru, 2002).

✓ THE PUBLIC SECTOR ONLY PAYS WHEN SERVICES ARE DELIVERED

Usually, any PPP payments by the public authority only commence when project services begin to be delivered. If projects are late, the authority will not

pay and therefore the taxpayer does not bear the cost. The level of payment made by the authority will relate to the quality of services provided and will reduce in some sort of relation to a reduction in services being delivered. The private sector contractor has a direct financial interest in ensuring that the asset is delivered on time and the required service levels are provided. (PWC) However, there is always the risk for the public sector, if the contractor fails to meet the output specifications, to “inherit” a dysfunctional and money-consuming project, which would be a constant source of problems until a solution for its proper operation is provided.

✓ PPPs FORCE THE PUBLIC SECTOR TO FOCUS ON OUTPUTS (OUTCOMES) AND BENEFITS FROM THE START

PPPs rely on developing a detailed output specification and therefore they change the fundamental nature of the public sector procurement.

This focus on output levels is a key reason why PPPs prove to be better value for money. They create a focus on costs and benefits and a discipline to the budgeting of a project, and act as a catalyst for tough political decisions, which are otherwise avoided at the outset, leading to high levels of cost overrun. (PWC)

✓ WITH PPPs, THE QUALITY OF SERVICE HAS TO BE MAINTAINED FOR THE LIFE OF THE PPP

The quality of service under a PPP is specified at the outset and is not expected to decline throughout the life of the PPP. The price committed to by the private sector is to maintain those standards throughout. This obligation contrasts starkly with traditional procurement, where asset condition and hence service levels will often decline significantly as the asset becomes older. (PWC)

✓ DEVELOPMENT OF SPECIALIST SKILLS

A large number of international companies have created specialist PPP units and have invested in the expertise and understanding of the PPP market and pricing of deals on a whole life cost basis. PPPs have created beneficial economic investment opportunities across a spectrum of public sector areas

and have encouraged the development of a facilities management sector capability, skilled in operating and maintaining new facilities. (PWC and Bing Li et al)

For the time being this is not the case for Greek firms as there is not yet an established PPP market. However, following the international practice this would comprise a long-term benefit.

✓ PPP TRANSACTIONS CAN BE OFF BALANCE SHEET

Under Eurostat guidance or local accounting rules, many PPP transactions can be classified as off the public sector's balance sheet. This means the authority will only account for the annual payments it makes to the PPP company, and not for the assets and liabilities of the project, including its debt. (PWC)

However, this is not always an advantage, as in the case the SPV fails, the project will remain unsold and the financial institutions involved in the project will claim their money from the government, especially if a bank was not part of the SPV consortium but another financial intermediary.

✓ DELIVERING TO TIME

Two recent UK reports (HM Treasury, 2003), showed that under the UK's PFI program 88% of projects (HM Treasury sample) and 76% of the National Audit Office sample were delivered on time. This compares with earlier NAO research into non-PFI construction times in a sample of 66 projects that showed only 30% were delivered on time. (PWC and S. Harris)

✓ STRENGTHENING OF NATIONAL INFRASTRUCTURE

The aspects of PPP that encourage innovation and efficiency can also enhance the quality and quantity of basic infrastructure such as water, wastewater, energy supply, telecommunications and transport. They can also be widely applied to other public services such as hospitals, schools, government accommodation/real estate, defense and prisons. A PPP program also enables the construction of buildings and provision of services, *which would not otherwise be available* due to the ability of the public sector

to pay for both construction and operational costs over a long period of time. (S.Harris)

✓ **DEVELOPMENT OF A NEW BUSINESS SECTOR**

PPP has created a new business sector in Europe of firms experienced in building and operating PPP projects. Countries adopting PPP have often used foreign advisors initially but have soon developed their own skills and are now competing on the international stage for business in third countries. (S.Harris)

2.1.5 Common criticisms of PPPs (Source: Bing Li et al, PWC and S. Harris)

✓ **BEFORE PURSUING A PPP APPROACH, THE PUBLIC SECTOR AUTHORITY SHOULD CONSIDER THE FOLLOWING ISSUES (PWC):**

- Does sufficient private sector expertise exist to warrant the PPP approach?
- Does the public sector have sufficient capacity and skills to adopt the PPP approach?
- It is not always possible to transfer life cycle cost risk
- PPPs do not achieve absolute risk transfer

✓ **THE PUBLIC SECTOR MUST RECOGNISE THE DISADVANTAGES OF PPPs IF THEY ADOPT A PPP APPROACH (PWC):**

- PPPs imply a loss of management control by the public sector
- PPP procurement can be lengthy and costly

✓ **THE PRIVATE SECTOR HAS A HIGHER COST OF FINANCE**

The private sector's weighted cost of finance, both debt and equity together, is typically between 1% and 3% higher than the public sector's cost of debt on a non risk-adjusted basis. This cost of finance increases the overall cost of a PPP relative to traditional procurement, unless cost efficiencies delivered by the private sector outweigh this incremental cost. (PWC and S.Harris)

✓ PPPs ARE LONG-TERM RELATIVELY INFLEXIBLE STRUCTURES FOR THE SPVs

In a PPP the public sector deals with the SPV as one partner and not as a group of partners. However the SPV's structure is complex and includes construction firms, design firms, advisors, service providers, financial institutions and more. All these have to co-ordinate and organize their actions in order to complete the project, and this usually is not an easy task.

Most PPP contracts are in any event given flexibility to respond to changing public needs. In addition the concession contracts usually have provisions such as benchmarking and market testing which enable the public sector to benefit from the emergence of improved methods of delivery for relevant services. Far from restricting choice for the public sector PPP enables it to plan the use of its resources strategically rather than just scrabbling for funding as part of an annual budget process. In addition, even in the UK with over 600 PPP projects PPP procurement only amounts to 15% of public sector capital investment since 1996. It is most unlikely that PPP will become such a dominant form of procurement that it ousts traditional forms, as it is unsuitable for some areas (PWC and Bing Li et al).

✓ PPP PROJECTS CAN ONLY BE UNDERTAKEN BY LARGE MULTI-NATIONAL FIRMS LEAVING NO OPPORTUNITIES FOR LOCAL SMALL AND MEDIUM ENTERPRISES.

International PPP contractor/operators subcontract most of the activity involved to smaller firms. Many large UK construction firms do not undertake any actual construction themselves any more but just project manage subcontractors. There are plenty of opportunities for firms of all sizes to be involved in PPP projects. (S. Harris and Bing Li et al)

2.2 PPPs in Greece

2.2.1 Historic review

Public and private co-operation in infrastructure projects have emerged in Greece during the formulation and implementation of the Community Support Frameworks (CSF) (CSF I: 1989-1994, CSF II: 1994-1999, CSF III: 2000-2006). This effort to increase private involvement was in large extent driven by the central state. Therefore, in the existing public-private projects the one partner is always a central public authority (relevant Ministry). Public-private partnerships at local level were few because the private sector was insignificantly involved to the co-operative schemes. Another distinct characteristic of PPPs project in the Greek context is that they have been developed as an effort to modernise the provision of public services. It could be debated that NPM (New Public Management) ideology is responsible for developing PPPs in the Greek context (Getimis and Marava, 2002).

Greek Government launched in late 1980s and in 1990s an administration reform. It had been recognized that the Greek public sector was inefficient, highly bureaucratic, and large. For its first time in his current history, Greek state was "*under attack*". A thorough administration reform has been incorporating in policy documents (Ministry of National Economy: 1995, Ex post Evaluation of CSF 1989- 1993 Obj1). Almost all political parties promoted an ideological principle of "less state" in some extent. This reflects a response to the challenges imposed to the structure of the Greek state and its public administration from the process of European Integration and globalization (Getimis and Marava, 2002).

According to the Declarations of the previous Prime Minister (1996-2004), the key to the success for the Greek Economy and its competitiveness has been to modernize its government by engaging at:

- a) a privatization program in order to reduce the public debt through selling out public enterprises
- b) an increased co-operation with the private sector
- c) a modernization effort of public administration by adopting markets principles ,

d) a deregulation of markets mainly in the field of telecommunications and energy which enhances competition (Declarations of Prime Minister: Vima 23/4/2000).

This inadequacy of public administration was marked to the formulation and implementation process of Community Support Frameworks too and the need of its reform was even more stressed. It was argued that the administration of the A' CSF was not successful because of the problems that came up from the bureaucratic character of public administration. The *"Structural weaknesses of Greek Administration"* was clearly stated as a factor of failure, in the evaluation of almost all of Operational Programs (OP). This was even stricter to OP of improving infrastructure in comparison with other priority axes of CSF 1989-1993. And there, the most serious delays were noticed to the implementation and financing of large transport infrastructure projects. Amongst the factors contributing to this failure was the lack of vertical administrative structure resulting, for example, in:

"-Difficulties in the approval of the revised studies during the implementation of the works, lengthier procedures

-Not proper supervision of the works,

-Difficulties regarding the evaluation of projects quality (not sufficient human resources)" (Ministry of National Economy: 1995, Ex post Evaluation of CSF 1989- 1993 Obj1).

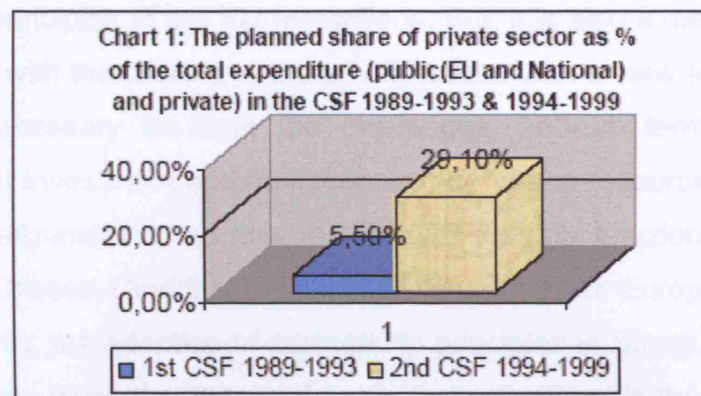
As a consequence, during the negotiations between European Commission and the Greek State for the B' CSF there was a pressure from the Commission to the Greek partner in order to:

"Adopt a new approach of public administration regarding community actions with enhancing partnerships" and particularly to the Implementation of major infrastructure projects through private involvement" (European Commission, Greece, CSF 1994 - 1999, pp. 27-28).

Following these suggestions, the Greek state has proceeded:

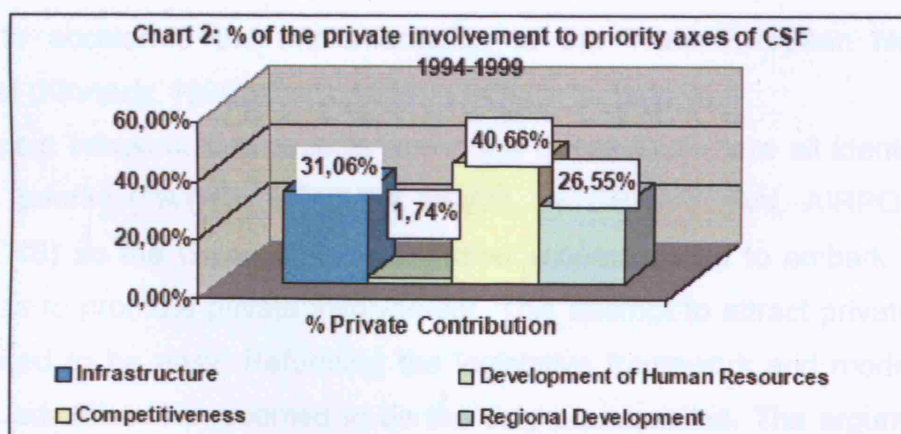
- in an administration reform of the management of B' Community Support Framework and

- an attempt to attract private funds for implementation of a number of major infrastructure projects. This is reflected to the increasing share of private involvement as percentage of the total estimated expenditure.



(Source: Getimis and Marava)

This intended involvement of private sector during the CSF II 1994-1999 was substantially enlarged in comparison with the A' CSF (chart 1). PPPs projects stood for a significant part of this increase (Chart 2). PPPs had been suggested to be the alternative way of providing the large infrastructure needed. This was quite logical as Infrastructure transport development was the main policy priority of Greek government (and EC). The competitiveness of Greek Economy would not increase if there were not efforts to reduce its isolation. The Greek authorities had recognised that the available funds were not enough and were engaged in an effort to attract private funds (European Commission, Greece, CSF 1994 - 1999).



(Source: Getimis and Marava)

Private involvement in CSFs has been justified with the adoption of partnership principles of the EU regulations. But, it is also a matter of building co-operation with the players in the private sector with a view to attracting the resources necessary to meet the challenges, both in terms of financial resources (for investment and management) or human resources (know-how). Despite the argument about how the concept actually functioned in practice, not only in Greece (Andrikopoulou: 2000) but in other European Countries (Scott J. 1998), the adoption of partnership principles in Structural Funds had for the first time given the impetus for private involvement in the Greek context mainly through the B' CSF.

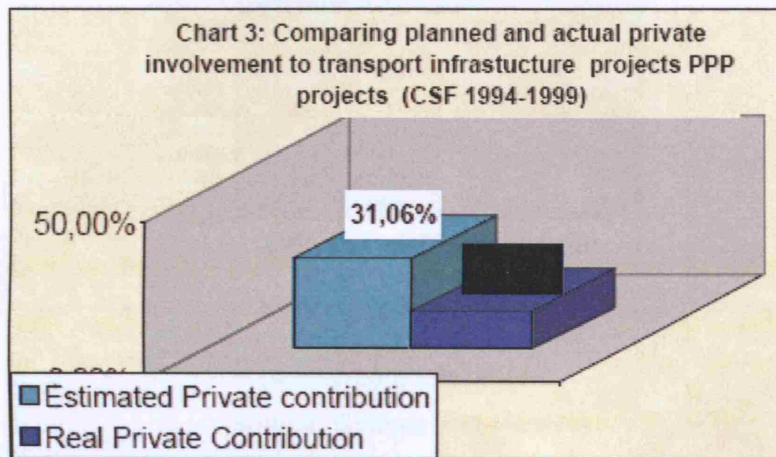
Simultaneously, European transportation policy had argued strongly for PPPs. This argument around the private participation in the provision of transport infrastructure had been emerged during the establishment of the idea of the European Union. Then, it was evident that one of the obstacles to the establishment of the Single Market and the free movement of goods, people and capital was the poor transport. Private interests in EU have mentioned that the sluggish economic performance of the EU was due to the lack of an integrated transport system in European space (Cowie: 1996). So, *"in the 1990s the concept of the Trans-European Networks (TENs) has emerged as a complement to that of the single market"* (Cowie: 1996, pp.5). Soon, was prominent that this policy goal would not be accomplished in time or in a desirable level without the private involvement. Private capitals seem to be able to accelerate the implementation of the Trans-European Networks (TENs) (Kinnock: 1998).

The main infrastructure projects under the Greek CSF were all identified as TENs priority (PATHE, EGNATIA ROAD, INTERNATIONAL AIRPORT OF ATHENS) so the Greek state was further recommended to embark upon a process to promote private involvement. This attempt to attract private funds appeared to be easy. Reforming the legislative framework and modernising public administration seemed to be the only prerequisites. The arguments in favor of this public-private co-operation were (as they were mentioned in B' CSF):

- Saving public money that it could be used in other projects,
- Earlier completion of the projects,

- Pooling of resources in terms of know-how or finance.

Nevertheless, during the implementation of CSF was evident that the goal of attracting private capital was too enthusiastic. Actually, until 31/3/1999 less than 50% of the planned private funds were engaged to PPPs (chart 3).



(Source: Getimis and Marava)

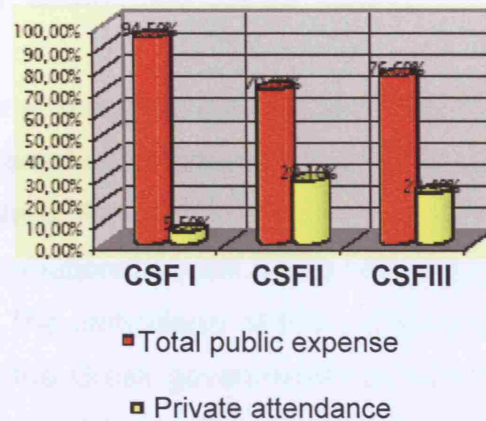
This private involvement was difficult to be ensured due to a number of reasons. The basic one was the sluggish process of reforming the Greek incoherent current legislation. Subsequently, the establishment of a partnership between public and private actors was problematical (KEPE and REMACO, 1999).

Actually, the construction of public works was designated through a complicated legislative framework (Law 1418/1984) which had been modified by the application of EU directives (PD 23/1993).

The same logic of activation of private resources aiming at the saving of public resources was also developed in the CSF III and it was promoted by the Ministry of Environment, Land planning and Public Works, as much as from the Ministry of National Economy. C.Pahtas of the Ministry of National Economy in 2001 had stressed, that " the main aim is the attendance of private enterprising institutions....in all the sectors of economy and not only in the transport infrastructures. Thus, in the first year of the CSF III the Ministry announced the creation of a new law concerning the extension of public private collaborations in other sectors, excluding the defence (harbour installations, marinas and ski centres, energy and telecommunications

projects, projects of water supply and sewerage etc) both for large projects and for small projects of regional /local importance. (Vima, 2001).

Chart 4: The appreciated percentage of private attendance in the financing of CSFs in Greece 1989-2006 (budget)



(Source: Getimis and Marava)

Of course, the implementation of transport infrastructures with the system of self-financing continued to constitute the basic form of public private collaboration. In the operational program "Road axes, harbors and urban growth - EPOALAA 2000-2006", the fundamental objective was the attraction of private funds in a percentage of 38,65%, that would result "in more convenient and more rapid infrastructure projects of better quality and in the disengagement of public resources". (Ministry of Environment Planning and Public Works, 2001)

It has been argued that the PPP method was adopted as a managerial tool in order to increase the effectiveness and efficiency of Greek public administration mainly through CSFs. The only factors for the promotion of the PPPs in infrastructure projects seem to be the legislation of the status of public and private co-operation.

What really took place was that the Public-Private partnerships developed for the implementation of large infrastructure projects, at that time, were usually self – regulated in ad hoc basis trying to diminish the ambiguity of the law on concession agreements to the Greek Context (Getimis and Marava, 2002).

2.2.2 Greek PPPs

Until now, only three large-scale transport PPP projects have been completed as concessions and are operational in Greece, with smaller projects delivering underground parking, leisure, and cultural facilities via a form of PPP. The 3 projects are:

- The international airport of Athens “Eleytherios Venizelos”

The new Athens International Airport project consisted of a 30-year BOOT concession. The Hellenic Republic and a private consortium created a private company, Athens International Airport SA, to own and operate the airport for a period of 30 years. The particularity of this project is that for about 15 years prior to its initiation, the Greek government had introduced a special tax (in the price of every airport ticket in Greece a small sum was included and paid by the passengers) in order to raise the necessary capital to finance the project.

- The Athens Ring Road “Attiki Odos”

The competition for the appointment of the preferred bidder was held via the DBFO procurement route. An important aspect of the whole process was the existence of a progressive promotion of conventional engagements, as in the connection of English-French Channel Tunnel. This is not used in other projects and it constitutes a particular element of the process, as the contractor was exposed in disproportionate risks, given the conventional uncertainty up to the completion of lending conventions for four years (1996-2000).

- The Rion Antirion bridge

The project was constructed using the Concession procurement route. The operation of the bridge passed on to the contractor company BRIDGE HM as soon as the project was completed. The Concession forecasts maximum limits of tolls, which the concessionaire has the right to determine. Moreover, he has the right to use his own policy for tolls, with cards for seasonal or regular users. The concession period will not exceed the 42 years from the date of the beginning of the Concession. After that period the ownership and

operation of the project will pass on to the Greek State in order to undertake its operation.

From the above, it is clear that the 3 projects have the common characteristics of PPPs (see section 2.1.3) but for every case there were project-specific regulations and agreements, which arise from the absence of an established PPP legislation.

More detailed information about these projects (including financial data, construction and operation details, etc) is presented in the Appendix B (B1).

2.2.3 Future PPP projects

Academic 1 participating in the research states that: **“With the new legal framework for PPPs in operation since the end of 2005, a new boost of PPP projects is expected in Greece, considering the fact that the national construction market was in recession during the last 2 years (after the Olympic Games of 2004).”**

The new law establishes a PPP Task Force within the Ministry of Economy and Finance and defines parameters for a number of PPP-related issues, including tendering and negotiation procedures, tax, financial and accounting issues, securitisation issues, arbitration proceedings etc. The law is aimed mainly at small to medium-sized projects with a maximum construction value of up to €200 million. Already there are several proposals for PPP projects, covering a wide range of activities (schools, transport, refuse collection etc). The first project will be a pilot program of the Organization of School Buildings, concerning the construction, operation and maintenance of 27 schools in Athens.

“Domestic PPP market is active for the last two years now (in theory and not in practise), in particular in the transport sector, however the completion of the legal framework at the end of 2005 created even bigger mobility both in the public and the private sector.” (Academic 1)

The basic drivers for the Greek PPPs at the moment are the LOCAL AUTHORITIES, taking advantage of the provisions of the 3274/2004 law in combination with their flexibility, but also the Public sector, with big scale projects (roads, schools, etc) (I.Giannaros, 2006).

Analysis conducted in the context of the Strategic Development Plan for Transport Infrastructure – Greece 2010 identified the priority transport axes for the development of the country's basic road network. Their development is combined with major investment projects in points of access (ports, airports) and secondary transport networks.

A new program for expanding and improving the quality of the Greek motorway network was announced in 2001. There are seven motorway projects included in the program (Maliakos-Klidi, Korinthos-Patra-Pyrgos, Ionian Road, Korinthos-Tripoli-Kalamata, Motorway of Central Greece, urban motorways of Athens, the Thessaloniki submerged tunnel), which according to current expectations will be delivered using PPPs. The Thessaloniki submerged tunnel PPP, expected to cost approximately €370 million, and the Maliakos – Klidi motorway PPP, expected cost approximately €450 million, are currently in procurement. The other five projects, with a combined total expected cost of €3.15 billion, will be tendered in the near future (PriceWaterhouseCoopers, 2005).

Information about the pilot program, as well for other approved PPP projects, is presented in the Appendix B (B2).

Conclusively, the Greek government is now promoting PPPs more than ever, in its effort to fortify the economy of the country and stimulate the provision of public services of high quality. The base for this march of events was set during the last 20 years (section 2.2.1.) and combined with the exploitation of the international experience in this field, could lead to a successful application of this procurement method in Greece. The involvement of private funds for the provision of public services could be an important tool for development (see sections 2.1.4-5) both socially and economically, but it demands flawless co-ordination and careful actions on behalf of the government. In chapters 4 and 5 of this report will examine this in more detail.

CHAPTER 3

METHODOLOGY

3.1 General

This report is a product of a research conducted in the UK and in Greece, which included an extensive literature review (international literature about PPPs, newspapers, proceedings of conferences, publicized interviews, reports of international and national organizations etc) and personal conversations with people relevant with the issue (academics, economists, engineers etc).

3.2 Research Considerations - Choice of Research Methodology

Among scientists and academics there is an interlocution about the methodological issues and the way of how a research should be conducted. The difference between quantitative and qualitative research to data collection, are found commonly to represent divergent and opposing traditions in the social sciences (Robson, 2002). Typically there is an attempt of isolation of the two broader strands as heirs of quantitative and qualitative traditions. Giddens (1976, cited in Gilbert, 2001) describes this situation as 'positivistic' versus 'interpretative' or 'constructivist' (see Robson, 2002), while Easterby-Smith et al (1991) support that the two positions are 'positivism' and 'phenomenology'.

The quantitative approach or otherwise positivistic tradition believes that knowledge is generated and acquired through following a scientific mode with the application of logical principles and reasoning. The key idea according to Easterby-Smith et al (1991: 22) about positivism is that "...the social world exists externally, and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition."

The object, eventually, is to develop reliable and valid ways of collecting 'facts' about the society, through employing measurement, in order to

statistically analyse and produce explanations about how the social world operates (Gilbert, 2001; Bryman 2004).

The qualitative approach to research emerges from an area of philosophy known as interpretative tradition, which is related to the nature of reality and the role of the researcher (Gilbert, 2001; Easterby-Smith et al, 1991). The concept, according to Gilbert (2001), is that the social world consists of multiple, subjective realities that individuals or groups construct. Hence, the task of researchers is to appreciate the different meanings that people place upon their experiences, rather than collect and measure data of external causes in order to explain their behaviour (Easterby-Smith et al, 1991).

Due to the exploratory purpose of the study, with the need to elicit thoughts and knowledge of question at hand, the research design was qualitative; based on primary and on secondary data as well, since the subject is broad and the time and resources limited.

3.3 Application of research methodology

The methodology of the research includes:

- Literature review about PPPs in general (books, reports, articles, websites etc).
- An historic review of PPPs in Greece based on official data from the public domain (e.g. Ministry of National Economy, Ministry of Environmental Planning and Public Works, European Commission) and other sources.
- A brief presentation of the basic points of the new legislation, as a complete analysis would be meaningless and would require special legal knowledge. This presentation is accompanied by a review that derives from a comparison with the international practices, and aims at the detection of the weaknesses that future amendments will focus on.
- An evaluation of the procedure in Greece based on the international experience, in order to examine if the implementation of the Greek program follows the international practice and whether it will face similar problems that other countries experienced in the past.
- The final stage of the research, according to the initial planning, was to conduct a series of interviews with possible participants in PPPs, in order

to study the opinions and the intentions of both individuals and organisations (public and private). However, in this stage the research faced the following problems:

1. In Greece there are very few persons that have real knowledge about PPPs. These persons hold important positions, whether they work in the public or the private sector (Ministries, Banks, Construction Firms), thus it was practically impossible to approach them for interviews due to their heavy workload and this was evident from the fact that all the attempts to meet them were unsuccessful.
2. When several people were approached with the intention to comment on the subject, it was ascertained that while they were eager to talk about PPPs, at the same time the level of their relevant knowledge and/or information was relatively low. They expressed their concerns, that before the initiation of the program they could not possibly form a complete opinion on the subject. Thus, at that specific moment, they were unable to contribute substantially in the research.
3. The vast majority of Greek academics are not familiar with the subject of PPPs. There are of course some sporadic studies and research papers related to the subject, but generally they examine either specific projects (case studies) or issues that concern international projects and techniques.
4. The procedure of PPPs involves a wide variety of professionals (engineers, economists, lawyers, accountants and more). Therefore the formation of a common questionnaire for all of them, could lead to the collection of a whole range of different opinions that would be difficult to categorise, compare and connect, because everybody would try to promote his/hers opinions based on prejudice and assumptions and not on facts.

Taking all the above into consideration, a different method was chosen for the research in order to reach safer results. An “open-ended” approach was chosen for interviewing. This approach included open conversations on the subject that could cover any aspect of PPPs, perceived to be important to the interviewee. Their value differed and their main focus varied according to the professional background of the participant. E.g. the conversations with

academics focused on general administrative issues, whereas the conversation with the lawyer focused on legal issues.

These conversations that are presented in the text with the form of quotes and additional comments (marked with bold letters in the text), supplement and complete the rest of the research and their combination is the basis for the proposals, recommendations and conclusions of this report.

The breakdown of the group of people that were approached, follows next: two Greek academics, one director of a public authority that constructs a motorway in Greece, one program manager of a construction firm, two civil engineers working in the private sector (one in a large firm and one in a medium one), one economist (bank consultant), one member-employee of the Technical Chamber of Greece and one lawyer relevant with construction issues.

Appendix A provides an indicative list of topics that were discussed in these conversations (divided into categories of interest), a table presenting which categories of topics were discussed with each participant, a schedule of the interviews and details about the occupation of the interviewees.

3.4 Model of research design

Table 2 depicts diagrammatically the relations between the stages and illustrates the outline of pathways undertaken throughout this research.

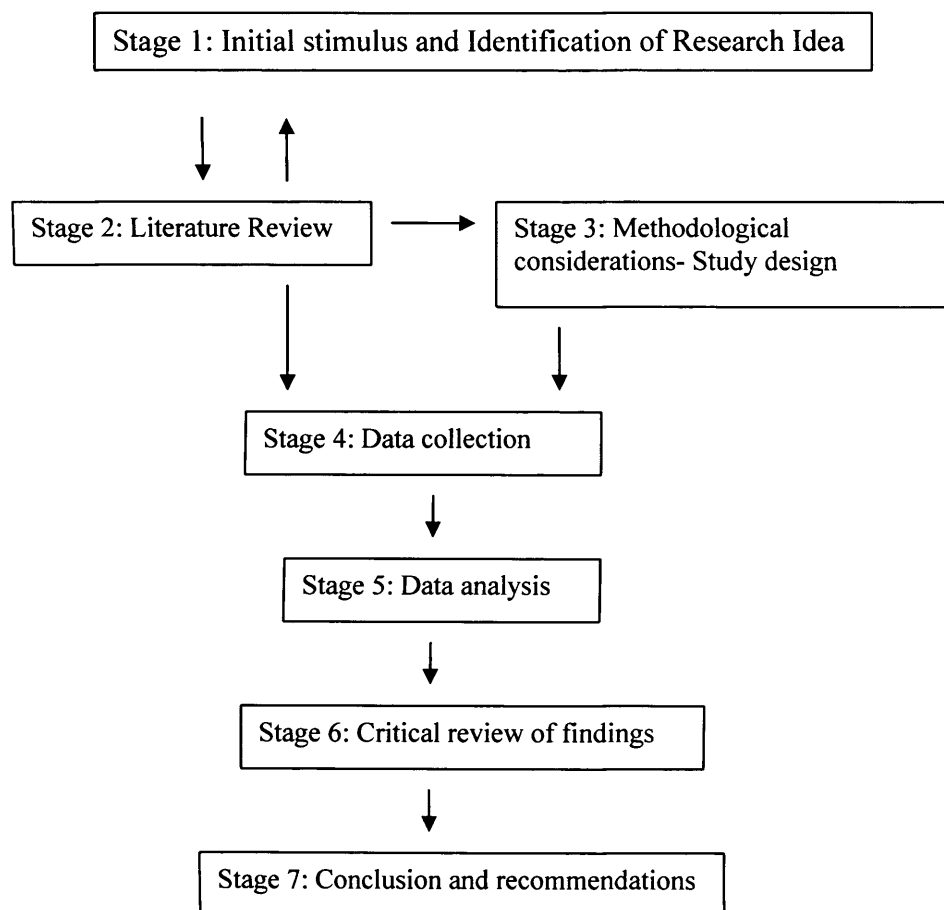


Table 2: Research design plan

CHAPTER 4

LEGISLATION FOR PPPs

4.1 EU Legislation

The Commission presented a Green Paper on PPPs and Community Law on Public Contracts and Concessions in April 2004 (Green Paper on Public-Private Partnerships and Community Law on Public Contracts and Concessions, 2004). The following box outlines some of the major actions or initiatives that the EU has taken in the area of PPPs until this date (Pricewaterhousecoopers 2005).

Box 3: EU activities/actions concerning PPPs		
Date	Action	Source
1983	White Paper on Growth, competitiveness and employment	COM(83) 700
1997	High Level Group on PPP Financing of TEN-T projects (Dinnock Report)	COM(97) 453
2000	Commission's Interpretative Communication on Concessions under Community Law	OJEC (2000/C 121/02)
2000	Proposal for a Regulation of the Council and Parliament concerning the granting of aid for the coordination of the transport by rail, road and inland waterways	COM(2000) 5
2001	White Paper on European Transport Policy for 2010: time to decide	COM(2001) 0370
2002	Building a Valuable Approach to PPPs Working session on the draft guidelines	COM(2001) 0370
2003	Guidelines for successful Public Private Partnerships – DG Regio and dissemination at a series of international conferences	DG Regional Policy
2003	A European Initiative for Growth – Investing in Networks and Knowledge for Growth and Jobs	COM(2003) 680 final
2003	Proposal for a Decision of the European Parliament and of the Council amending Decision No 1692/96/EC on Community guidelines for the development of the trans-European transport network	COM(2003) 564 Adopted on 21 April 2004
2003	Regulation amending Council Regulation (EC) No 2236/95 laying down general rules for the granting of Community financial aid in the field of trans-European networks	Adopted on 30 March 2004 – awaiting publication in OJEC COM(2003) 561
2003	Communication from the Commission: Developing the trans-European transport network: Innovative funding solutions & Proposal for a Directive on the widespread introduction and interoperability of electronic toll collection systems	COM (2003) 132 final
2003	High level Group Report on the TEN-T network (Van Miert Report)	DG Transport
2004	Eurostat proposals on accounting treatment of PPPs	CMFB and Eurostat news release (STAT/04/16) February 2004
2004	New Procurement Directives – including introduction of Competitive Dialogue	Adopted in February and awaiting publication in OJEC
2004	Green Paper – EU consultative paper on PPPs and Community Law on Public Contracts and Concessions	COM (2004) 327 final May 2004

Table 3: EU activities/actions concerning PPPs (Source PWC)

The Green Paper recognized that recourse to PPP arrangements to deliver infrastructure projects had developed during the last decade at Member State

level and that greater use of PPP structures could help bridge the investment gap in relation to the planned trans-European transport networks. The aim of the Green paper was to launch a public debate on whether current rules should be improved and whether EU-level intervention was needed to give economic operators across Europe improved access to the available opportunities of PPP under conditions of legal certainty and real competition.

The Green Paper focused primarily on the procurement aspects of PPPs, considering the extent to which Community rules apply when the private partner is selected and then for the duration of the contract, with a view to identifying uncertainties. It also proposed a wide set of instruments and tools available to improve the Community framework surrounding PPPs, such as interpretative communications and exchange of best practice. When considering these issues, the Paper distinguished between PPPs based on purely contractual links and arrangements of an institutional nature, involving the joint cooperation between parties in a distinct mixed-capital legal entity (Pricewaterhousecoopers 2005).

The lawyer participating in the research points out that: **“The Green Paper comprises an important tool for the promotion of PPPs in a European level by establishing a common basis for reference, however, due to the fact that every country-member has different regulations and legislations, for the time being it can only provide general guidelines.”**

4.2 Greek Legislation

4.2.1 The new PPP law

After a long period of public consultations, the 3389/2005 law, for the Cooperation of Public and Private Sector in Greece, was voted by the Greek Parliament and was published in the Newspaper of the Government on the 22-9-05.

“After the success of PPPs in the Great Britain and in other European countries, the Greek government hopes to benefit from the know-how, the experience and the resources of the European private sector for the completion of a series of infrastructure projects.

With the establishment of the 3389/2005 PPP law, both the public and the private sector in Greece expect the progressive creation of a dynamic domestic PPP market for projects of medium and small scale. The institution of PPPs constitutes an innovation for the Greek state, as well as for the majority of the companies of the private sector that intend to participate in the new market, because during the last decade only a relatively small number of special executives of the state and the private sector were involved in the management and construction of PPP projects.” (Academic 2 of the research)

The new elements that are included in N. 3389/2005 are according to the Lawyer interviewed:

- **The process of entrusting, in which the EU Directive 2004/18 is incorporated, and more specifically the section that forecasts the process of "Competitive Dialogue" that aims at the facilitation of the preparation procedures for the completion of projects via PPP.**
- **The possibility for the government to pay for the project, instead of the final user, with annual payments after the completion and during the operation phase of the project.**
 - **The application of PPP for the provision of services.**
 - **A completely new approach to the choice of the new projects and the calculation of their total cost.**

4.2.2 PPP Categories

PPPs in Greece are distinguished in three categories, which are explained below (Mpoura and Kalfakakou, 2006):

1) **Concessions**: They concern roads or bridges with tolls, where the income from the tolls (based on the predicted volume of circulation) is equal or exceeds the cost of the initial investment for the construction plus the costs of maintenance and operation. In other countries concessions are also in effect for certain services of local authorities, for example for the treatment and the supplies of water, the networks of sewerage and the management of humid waste, the collection and the management of litter, and the municipal transport.

2) Hybrid PPPs: These concern services for which the final user pays for, but these payments, for certain political and/or social reasons, are maintained in a level insufficient to cover the construction cost and the functional expenses. Some examples are the provincial buses, the museums and the Community centres of sports and entertainment. In these cases, the government supplements the additional cost.

3) PPP with the form of Private Finance Initiative (PFI): This category is quite popular during the last 13 years, especially in the Great Britain, and it concerns all those sectors where the payment by the final user is not possible or politically acceptable. Some examples are: public schools, public hospitals and centres of health, as well as projects that the government uses for social purposes such as courts, prisons, municipal buildings, police departments and fire stations.

The Director of the public authority states that: **“Greece could not probably predict which PPP model is suitable for the Greek reality at this stage, thus both the English model (PFI) and the French model (concessions) are included in the new law. In my opinion, this was the ideal choice, in safeguard of the rights of the Greek state which now is more flexible and free to approach different projects with different methods”.**

4.2.3 Process of approval

The Special Secretariat (SS) for PPP of the Ministry of Finance and Economy will have the responsibility to gather all the necessary data for projects suitable for PPPs and then it will construct a temporary list of these projects, as well as a report for each one from them.

This report will include:

- Technical, economic, legal and social reasons that justify the selection of the PPP procurement route for the specific project.
- The criteria that the SS based its selection of the particular project on (in contradiction to other projects).
- Possible preparatory actions (e.g. nomination of advisors).
- The process of entrusting that the SS proposes for the particular project.

- Indicative timetable of the whole process.
- Indicative budget.

From the moment that a project is included in the list, the Public Authority that proposed it must submit within 2 months an official application for approval in the Inter-ministerial Committee of PPP. The Committee will reach a decision within 2 months, based on the proposal of the SS. According to the interviewed bank consultant:

“The approval of the projects from the Committee of PPP means that:

- **The project is included in the Program of Public Investments.**
- **The participation of the State in the program of financing is under consideration.**
- **The SS undertakes the co-ordination of the entrusting process.**
- **A representative of the SS participates in all the committees for the selection of the preferred bidder.”**

4.2.4 Fundamental points of the new PPP law

The main points of the new law have as follows (Mpoura and Kalfakakou, 2006):

- It is in effect only for projects that Public Authorities propose. This means that e.g. a company of common interest that does not belong 100% in the state is not allowed to act as an assigning office for the realization of projects via PPP.
- PPP programs are completed via special purpose companies - vehicles (SPV) in which only the private companies participate. This means that, according to the discrimination in the Green Book of the EU, the law covers only "conventional" PPPs. The SPV is obliged to finance the project.
- The projects with a total cost of 200m€ or under, are included automatically in the law, and they are evaluated by a new administration structure of two levels:
 - The Inter-ministerial Committee of PPPs with the Minister of Economy and Finances as chairman, which will have the

general control of entrusting and implementing projects via PPP. It is also responsible to decide if projects with a cost higher than the limit of 200m€ are suitable for PPP.

- The Special Secretariat for PPP (SS), which will supplement the Committee at the management of projects via PPP. The SS will construct lists with the proposed projects, based on previous evaluations, and it will submit them in the Committee, which then will decide which projects to select for completion. The SS will coordinate, then, the process of entrusting of these projects.
- The new law incorporates the basic principles of the EU legislation. The concession will be assigned to the candidate consortium that submits the best economic offer. The assigning authority owes to publicize all the criteria of evaluation. The whole process is based on the relative processes of the 2004/18 Directive.
- The assigning authority can sign direct contracts with the financiers of the SPV. Also, in case a mechanism of direct payments exists, the Committee has the right to decide whether to approve it or not.
- About the risk allocation:
 - Planning permissions (they constitute responsibility of the Public Authority).
 - Archaeological findings (completion of the process of decision-making for new archaeological findings within 60 days and extension of the concession in case of delay).
 - Protection of the environment (the relevant studies should be completed and approved before the beginning of the project; in any other case the SPV is compensated for these costs).
 - Expropriations (they have direct priority and in case of delay the concession is extended).
 - The public Authorities and the organisations of common utilities owe to fulfil their obligations according to the timetable of the concession.
 - The SPV has the right to give part or the total of its rights and receivable accounts to financing organisations.

- Transfers of shares before the beginning of the operation period, as well as other actions of the SPV, are not allowed without the consent of the assigning Authority.
- Preferential tax treatment is provided in the SPV.
- Arbitration is responsible for the resolution of disputes, according to the concession. Any decision is final and binding.
- The responsible authorities for the resolution of all the disputes are the Greek courts.

4.3 Review of the new law

The General Secretary of the Technical Chamber of Greece (TCG) Theodoros Dragiotis stated (25/082005) that: "PPPs can contribute in the growth of the country and help the public sector to deliver necessary infrastructure projects and to improve the quality of its services. However, the law in Greece is insufficient and without the necessary improvements, there is a serious danger for cancellation of its usefulness as means of development of the country. International economic organisations, but also the international experience of similar programs, indicate the obvious danger, that in case of misuse, PPPs can overcharge the country, the public institutions and the Greek citizens, or to degrade this form of collaboration into situations of uncontrolled and dangerous business."

"It is widely agreed that PPPs, should not be considered as a panacea for the provision of suitable infrastructure and services in Greece and that the Program of Public Investments (PPI) should remain the basic means of growth." (Bank consultant)

Moreover according to the interviewed member of the TGC: **"A necessary precondition for the success of PPP in Greece is the existence of a powerful, sufficiently staffed and educated public administration, in combination with a complete legislative framework, that will have the ability to intrigue the interest of investors; in addition, the public sector should direct and control the private activity, without permitting misinterpretations, dysfunctions and cancellations of projects. "**

The TCG, with a letter of the Chairman Giannis Alavanos to the Minister of Economy and Finances Giorgos Alogoskoufis (17/6/2005), had pointed out the serious problems of the particular law.

In that letter, the Chairman of TCG, developed the observations of the TCG and mentioned a series of proposals that should have been taken into consideration during the formation of the framework.

More specifically, in the letter to the Minister of Economy and Finance are pointed out the followings:

1) The observations of the Technical Chamber of Greece that constitute a product of dialogue between the engineers in Greece, were not taken into consideration during the formation of the new legal framework.

2) Under the right conditions, the cooperation of the public and the private sector can become one of the main drivers of growth for the country. However, this particular law has serious problems. The national planning, the national strategy and the social control are absent. There are no criteria for projects or even for services that can be considered as PPP. Thus, all public projects and mainly all public services are considered fields of possible cooperation. However, there are projects and services that belong in the “hard”, traditional core of the public activity and cannot be used for enterprising action and private profit. The PPI should remain the main means of growth.

3) With the new law the public interest is not sufficiently ensured. Indicatively:

- The law does not forecast satisfactory minimal requirements for the State concerning the attendance of the bidders in the competitions, the period of the construction and the operation of the project and/or of the service.
- It does not ensure the sufficiency and the quality of the completed infrastructures. It does not clarify who has the right of the design, neither who has the right of the construction of the infrastructures.
- It does not make any indication for the level of control of the design process neither for the supervision of the construction. The predicted monitoring by the public services or by independent private companies does not ensure the quality of the design and the construction.

- Contrary to the international experience, it does not forecast that the contractor undertakes all the risks of construction.
 - It does not include the contract of the concession (the most important document for the formation of the obligations and rights of the private firms against the state and against the users) in the process of the competition.
 - It does not require any obligations for the bidders concerning the financing guarantees of the project, during the submission of an offer.
 - There is no prediction for the required levels of service quality and maintenance during the operation period or for the condition of the project after the end of the concession period.
 - There is no prediction for the required levels of safety for the workers and users.
 - It does not comply with the EUROSTAT standards for the risk allocation for PPPs.
 - It does not protect smaller enterprises that cannot undertake PPP projects.
- 4) The TCG is not opposite in the creation of a taskforce of central management and support of PPP, but only under the following conditions:
- There must be essential political and social control and the operation of the taskforce must be transparent at all levels.
 - Greek engineers together with the Technical Chamber Greece must participate in this taskforce.
 - There is no excuse for the absence of public control during the bidding process and/or the construction and operation phases of the project, in case the taskforce is dealing with a large number of projects

On the 25/082005 the General Secretary of TCG delivered a letter in the Chairman and the members of Parliamentary Committee for the PPP that included certain proposals and amendments, in its attempt to help the State to overcome future problems. These proposals have the support, in their majority, by many potential participants in PPPs (public or private sector).

The TCG proposes:

1. Because PPPs concern the design/construction of projects, the state should require the involvement of legal persons with the necessary technical sufficiency during the whole process.
2. The control of the design and the supervision of the concession, should comply with the existing legislation.
3. During the bidding process the state should inform the bidders about its minimum requirements, both for the construction and the operation phase.
4. PPPs should be used for projects with a cost more than 10m€.
5. In every case:
 - The project must be a part of the National or Regional Planning.
 - The time of completion of the PPP project should be in line with the National or Regional Planning.
 - For every project the public sector should examine if the PPP solution provides better cost and quality than the traditional procurement route.
 - The state should forecast the transfer of experience and know-how to public institutions.
 - The state should take advantage of PPPs to utilize the public fortune that cannot be developed with other ways.
6. Every year the Special Secretariat (SS) for PPPs should present a special report for the progression of PPPs to the Greek Parliament's Committee for PPPs.
7. Each proclamation for a PPP project should be accompanied from all the relevant information on the technical character of the project, as well as from the draft contract of the concession.
8. The concession contract must encompass all the obligations of the concessionaire regarding the transfer of know-how to the public sector, the specifications of the project at the date of delivery and the guarantees of good service.
9. The concessionaire should pay all the legal taxes.

CHAPTER 5

ANALYSIS

5.1 Introduction – Work Presentation

This chapter provides an analysis of the data (primary-secondary) collected during the research.

The objectives of this report are:

- to examine the actions of the Greek government towards the completion of the PPP program
- to examine if lessons from the international experience about PPPs were adopted and followed in the formation of the Greek PPP program
- to examine which services and projects are designed to be procured as PPPs

In the following chapter we will attempt to evaluate the process of introducing PPPs in the Greek market, based on findings from the international literature about the basic factors that are critical for the success of a PPP programme, combined with the outcomes of the interviews conducted for the needs of the report. Every critical factor presented is accompanied by comments on the Greek case. These comments are a product of a research conducted in Greece, which included an extensive literature review (newspapers, proceedings of conferences, publicised interviews, reports of international and national organisations etc) and interviews with people relevant with the issue (academics, economists, engineers etc) (see Appendix A).

5.2 Lessons learned from the international experience – The Greek case

5.2.1 Capacity building: Champion and critics

Pro-PPP champions are needed at political, civil service and private sector level. The single most important element for a successful PPP program is high-level political support. Bidders, banks and investors will only go to those

countries where they see a well thought out, clear-cut and nondiscriminatory processes in place.

The political champion should ideally be the Premier, President or some other senior, high profile Minister (ideally the Finance Minister), otherwise the chances of getting the political consensus needed are limited. In addition, investors will be more comfortable with countries where the political opposition is basically convinced by PPP as well.

The Greek Case: All the interviewees agreed that at this moment the political support of PPPs in Greece is ensured. The PPP program is one of the main priorities of the government, the new legal framework is active and there is a series of projects waiting for approval.

The main political champion is the Ministry of Finance and Economics, which has the vast majority of the PPP process under its jurisdiction.

Moreover, it was pointed out that the political opposition is in favor of PPPs, since it was the first that attempted to launch them some years ago (see section 2.2.1).

5.2.2 Public sector

Civil Servants' main concern is loss of jobs, of course. The fact of the matter is many public sector bodies are over-manned and there will be job losses. Government proponents of PPP need to be up front about this. Distrust of the private sector is also a big factor in opposition to PPP. Many civil servants see the private sector as the enemy who are totally motivated by profit.

Also, there are very real concerns about learning new skills, particularly for those involved in procurement that have to learn how to plan strategically for the future, create output specifications, negotiate with the private sector etc. It is important that knowledge of and understanding of PPP is spread as widely as possible and doesn't just reside in a small unit in the finance ministry, for example.

The Greek Case: 7 out of 9 interviewed stressed that this is an area of potential problems. For the Greek people, working at the public sector provides them with the absolute safety for their future. Thus, the threat

of job losses may cause much opposition that has to be properly controlled.

Moreover, the director of the public authority stated that the public sector in Greece is not in a very strong position to negotiate the terms of PPP contracts (see Attiki Odos case, Appendix B) due to lack of experience and relevant knowledge and he expressed his concerns about the value for money provided by the first set of PPPs in the near future.

The government must pay particular attention in these two areas, and a solution proposed by the academics questioned, is to seek for the contribution and experience of other countries with similar social conditions (e.g. Spain, Portugal).

5.2.3 Private sector

It tends to be assumed that the people you really have to convince of the benefits of PPP are the public sector. However in many countries the private sector is not certain about the idea either. Private sector companies can be doubtful about the ability of governments to pay long term, especially in developing countries and when dealing with municipal government. They often expect government guarantees, which, of course, destroy the idea of real risk transfer. They need to be persuaded about the value of properly structured termination payments instead. Their fears that there will be business for local firms in PPP need to be addressed. In many countries it is the construction industry that often takes the lead as private sector champion and it is useful for government to involve construction associations at an early stage.

The Greek Case: The research proved that the private sector in Greece is almost universally in favor of PPP. As the interviewed program manager states: “Greek construction firms face PPPs as a means to escape from the difficult position they are in, due to the lack of public construction investments after the Olympic Games of Athens 2004. During the last 2 years the construction product of the country faced a

decrease of more than 20% and PPPs can contribute substantially to reverse this situation.”

Finally, we have to underline the fact that on the one hand the questioned representatives of the public sector anticipate that with PPPs in Greece both small firms (small and medium projects with a local character) and large construction firms (large transport projects) are expected to benefit, because these partnerships will cover a wide range of projects and activities, but on the other hand the private sector interviewees argue that small firms will not gain anything from the whole procedure as their resources are limited for public projects that demand private funds (see also section 2.1.5).

5.2.4 The press, unions and the public

Those promoting PPP need the press on board. Opposition to PPP will use the press extensively. Proponents of PPP need to get in first and brief them properly on what is a complex matter. What is vital is to develop an informed debate. The local and regional press has a real role in engaging the public, as they tend to be more concerned about actual issues, such as local education and health facilities rather than just anti-government propaganda.

It is vital that unions are engaged early on. Unions have perfectly understandable concerns about the pay and conditions of their members.

The public's view on PPP is largely dependent on how well they are briefed by the proponents of and opposition to PPP, which is why the press is so important.

The Greek Case: All the interviewees mentioned that the press in Greece generally is cautious against PPP projects. It is holding a neutral position, and it is trying to examine all the aspects of the situation. In combination with the fact that a big part of the Greek press is not politically independent, this situation is a little bit confusing for the public that has not yet a clear opinion about PPP projects.

On the other hand, the unions are waiting for the launch of the first PPP projects in order to have a clear view about the whole process; however,

their actions so far aim at the absolute safeguarding of the employees' rights.

5.2.5 A PPP task force

Within Government there needs to be a body tasked with getting the whole process moving. This is a full time job and cannot be done by someone who has additional responsibilities. Eventually this will lead to the formation of a PPP unit. Most countries that have successfully developed a significant PPP program have central units or task forces usually reporting to the treasury or finance ministry.

The role of the central task force is to take responsibility for consulting to all concerned and creating policy to resolve legal, technical, commercial, perhaps even philosophical issues that arise.

Ideally the PPP unit or task force should have two aspects:

- A policy side (probably public sector employees), which can help sweep aside obstacles to private finance in the existing administrative structures.
- A project side consisting of private sector transactors with a mixture of the relevant skills such as lawyers, bankers, consultants, project managers, property specialists, IT specialists etc.

It is important that the PPP unit has responsibility for the entire PPP program and should have, ideally, some form of prioritisation role; including a veto. This is why setting up the PPP unit in the finance ministry makes sense. Experience has shown that setting up the unit in another ministry can lead to commissioning ministries ignoring the unit and developing their own procedures and projects.

The Greek Case: The structure of the Greek Taskforce for PPP for the moment, as described in chapter 5 (5.2.3), includes:

- 1) The Special Secretariat (SS) for PPP of the Ministry of Finance and Economy**
- 2) The Inter-ministerial Committee of PPP**

The main objection to this structure raised by the almost all the interviewees, is that it is rather centralised. Thus it is not flexible and

could lead to bureaucracy, in case the number of the approved PPPs exceeds a reasonable number.

However, they agree that at this stage the intention of the government behind this is to safeguard its position against the private sector and have the absolute control of the process by minimising short-term administrative mistakes.

Yet, according to the international experience and the opinions of the interviewees, in the future, these taskforces should be independent from the central government, include representatives both from the public and the private sector and expand their activity, by offering:

- **Knowledge base**
- **Guidance**
- **Standardisation**
- **Deal experience**
- **Approval of acceptable deals**

5.2.6 Advisors

Governments wishing to pursue PPP as a serious policy option need to realise that they are going to have to invest in it up-front and use the best possible advisors who have actual experience of PPP deals. These are almost certainly, initially, going to be UK or foreign advisors with UK experience. Unfortunately, there is an understandable tendency for governments, particularly those with developing economies, to shy away from what are perceived as expensive advisors. Part of the problem is the lack of pump-priming funding available to help governments pay for the sort of initial policy advice they need when looking at a PPP program.

The Greek Case: The Greek government identified the risks that may come up from a possible bad implementation of its PPP program and for that reason it has already asked the contribution of UK public advisors, who have the experience and can help during this crucial first period (Vima, 29/01/2006).

Moreover, as the program manager stated: "Taking into consideration older PPP Projects, we anticipate that the experience for the Greek firms

will be a result of the cooperation with large international construction firms (consortiums) that have years of experience in this field. This cooperation can be on a project level (consortiums), on a management level (advisors) or even on an ownership level (buy out of a firm)."

Finally, according to the lawyer: "... a solution to the problem of using foreign advisors and having full exploitation of the international experience would be the formation of a central EU knowledge unit and database that would give guidance and demonstrate precedents of PPP projects. But clearly this is not something that the Greek government can decide on its own."

5.2.7 Structural and legal issues

Ensuring a clear legal structure confirming the ability of the public sector authorities to contract out their roles to the private sector is critical. The existence of a concession law, for example, can make projects more attractive to financiers as the private sector cannot take the risk that the public sector doesn't have the authority to transfer obligations.

Other structural issues which will need to be addressed include tax treatment (particularly value added tax where exemptions may exist for public sector contracts but not private sector ones), the ability of political institutions to implement reform, the lack of sophistication of domestic capital markets, and the ability of either users or the government to pay for the cost of the new investment.

The Greek Case: The new legislation for PPPs is active and it comprises a good effort on behalf of the government to control PPP. However, there are still objections (see section 4.3) and for that reason there must be a constructive dialogue among the interest sides (public sector, private firms, advisors etc) that could lead to amendments to the law that will prevent future problems and keep every participant satisfied. The 3 interviewees coming from the private sector (manager, engineers) underlined the fact that until now the government had acted without the contribution of the private sector in the formation of the PPP

procedure and they expressed their concern that this may cause delays and frictions.

The lawyer participating in the research emphasized the importance of the description of the output specifications and the completeness in general of the PPP contracts, that according to his opinion is a fundamental precondition for a successful partnership. He identified that the current legislation lacks focus on this field and should be more complete and analytical. However, he did not have specific amendments to suggest at this point.

5.2.8 Prioritization

Most governments have a long list of projects that they would like to push forward but which are constrained by lack of resources – both finance and experienced individuals to guide the projects forward. From this “wish” list can be identified priority “pathfinder” projects – perhaps one from each sector – which will literally find the path for this project and future projects in this and other sectors. To manage expectations, all concerned, the government officials, the bidders, the financing institutions, should be made aware that it is a pathfinder project and as such will probably take longer than everyone would wish. This is because the project is acting as the catalyst to resolve policy and legal issues which were not foreseen when the enabling legislation was put in place. Completing nominated Pathfinders successfully builds confidence within the country and with the international PPP market.

The Greek Case: Following the international practice Greece launches PPP with a pilot program (see Appendix B, OSB project). Generally, the new PPP program is about small projects with a budget lower than 200m€, while the approval of larger projects will follow a different approach.

Moreover, according to the director of the public authority: “Older PPP projects (Attiki Ring Road, Rio-Antirio Bridge) will act as pilots for the 7 large PPP transport projects (see Appendix B), even though they were not under the current PPP legislation. Still, the concept is the same”.

5.2.9 Attracting private sector interest

Just announcing a PPP program is not enough to attract investment. The international market is looking for:

- A reasonable number of potential projects in the pipeline to make the investment of money and time worthwhile.
- Bankability. Unless projects are bankable the international financial community will not invest in them. *PPP cannot make an unbankable project a good investment.*
- Good credit ratings- for the country or (even more critical) the municipal or regional government concerned.
- A committed and structured approach from the public sector.
- Manageable political sensitivities- Given the sensitive nature of private sector provision of some services (such as health and education), the private sector will want reassurance that the client is able to manage this element of the process.
- Local capability (construction industry, banking market, good law firms and service companies).
- Strong local financial structures- ideally there should be a long-term finance market or, at least, the potential to develop one.
- Projects which offer scope for innovation in design.

The Greek Case: The majority of these factors stand for Greece; however, almost everything depends on the particularities of each project.

All the participants agree that particular attention must be given in the credibility of the local authorities that in many cases suffer from bureaucracy and lack of organization. This is an important factor, because the majority of the Greek PPPs include small and medium projects of a regional/local character.

Moreover, the academics stressed that innovation for design has to be supported intensely by the Greek state, because in Greece it is common knowledge that the construction sector does not spend time and money in this field, thus PPPs are a perfect incentive for firms in order to

promote it. They suggested that special monetary incentives should be available for the concessionaire in case of proven innovative solutions.

5.2.10 Suitable sectors

A PPP approach is suitable for any sector where it is possible to develop a service based on an output specification. In the UK sectors have included: Health (hospitals and clinics), Education (Schools and University accommodation), Justice (prisons and courthouses), Transport (light rail, roads, bridges), Utilities (water, waste disposal and street-lighting), social housing, defence (training simulators, sea and land tank transporters) and government buildings.

The Greek Case: The main sectors that are suitable for PPPs in Greece are (see Appendix B):

- **Utilities (waste disposal)**
- **Transport (roads, bridges, tunnels)**
- **Schools**

The Greek people, due to their culture, will not easily accept the involvement of the private sector in the provision of services such as justice, health and defense; their future development as PPPs is depended mainly on the success of all the other sectors.

The economist comments on that: “If all the Greek citizens accept the idea of a National Health System that is provided entirely by private companies, I will be 100% convinced that PPPs are a success. However, I believe that we have many years ahead of us to reach this level.”

Based on these facts, the majority of the interviewees are confident that PPPs will be successful in the provision of operational services, but they are doubtful about their success in the provision of the main services (e.g. services for the operation and maintenance of the building of a hospital, in contrast with the sanitary services).

5.2.11 Role of the banks

The role of banks (rather than the source of finance) is important in some areas of PPP however. Given their interest, role and skills, banks may assist governments in their analysis and control of PPP projects. The majority of PPP projects are financed by banks or other financing institutions, and as such, they will be regularly monitored by these organizations. Before agreeing to lend money to a PPP project the banks will insist on an independent confirmation of all the technical, environmental, economic and commercial studies on the project.

The Greek Case: According to Mr. Georgios Kotsoridis (Consultant of the National Bank of Greece), the critical issues for the banks, concerning PPPs are:

1) Their consulting role:

- **Linchpin between the public and the private sector**
- **Adopting the guidelines of the SS for PPP**
- **Preparation of the official documents of the offer for the public authority**
- **Briefing of the private sector**
- **Risk evaluation**
- **Construction of the financing structure**

2) The financing evaluation:

- **Modification of the risks endured by the bank according to the degree of reciprocity of the project**
- **The role of the bank consultants varies according to the risk of the project**

3) The types of bank financing:

- **Bank loans**
- **Bonds**
- **Participation in equity**
- **Financing after the completion of the project**

5.2.12 Time

A PPP policy is a long-term solution. It has taken UK ten years since PFI was established as a policy in the UK. Now projects can be done quicker and much more effectively. But it can't be done instantaneously. And there does need to be a clear recognition of the time that this policy development will take on the public sector side. And expectation needs to be managed accordingly. It is not possible to start a PPP process and sign the deal six month later. A real PPP project is going to deliver long-term value for money; it does take time because part of what is being done is investing the effort in understanding those long-term objectives and risks for both sides, public and private sector.

The Greek Case: Generally in Greece innovations and novelties meet a lot of skepticism or even opposition. However, there is good will by everyone for the success of PPPs. The 3 Greek operating PPPs (see section 2.2.2) are more than successful, and the public has realized that PPPs can sometimes provide better services than the traditionally procured public projects. Thus, the necessary credit of time for the smooth operation of the new PPP program exists; at least for the time being.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter will address the major themes that have been raised and investigated through the research and the information collected through the interviews conduction. Recommendations for further research will be suggested as part of the knowledge gained.

6.2 Report overview

PPPs currently, constitute one of the most important and most interesting topics of public dialogue in Greece. Their application will not only transform the way that public works are procured, but also will have a major effect on a social, economic and business level:

- a) The construction industry will have to change its operation and re-establish its goals.
- b) The public sector will have to learn to cooperate constructively with the private sector and stop facing it with caution and hesitation.
- c) The public will have to realize the fact that some public services will be provided by private firms and that this does not necessarily translates into a loss of their rights or into an overall increase of their expenses. Instead it can lead to more qualitative, more efficient, more constant services.
- d) The financing organizations (banks etc) will have to expand their activities and participate actively in the financing and management of the public works.

A requisite for someone, in order to comprehend completely the notion of PPPs, is to study every dimension of the subject and not every segment individually. This includes the understanding of their meaning, their basic characteristics, their advantages and their disadvantages (chapter 2).

In a national level and more specifically in Greece the whole notion of PPPs, in such a large scale, is something new. In order to study them, the first step includes, obviously, the investigation of their history and their evolution, in combination with the financial changes of the Greek economy (chapter 4), from which is evident that the experience in this field is small (only 3 PPP transport projects: Appendix B). On the other hand, the policies that were promoted by the Greek governments, concerning the transformation of the operation of the Greek state ("less state", etc), were generally in line with the basic principles of PPPs. Moreover, the contribution of the EU in the financing of the Greek investment plans, through the CSFs, during the last 17 years was a major source of income for Greece and a unique motive for the procurement of a series of public works that in any other case would not be completed. This inflow of funds, in combination with the international practice, "pushed" the Greek state into the reconsideration of the procedure of the provision of public services and consequently in the approach and examination of the PPP procurement route.

This march of events had as a result the gradual adoption of PPPs by the Greek state, which eventually resulted in the establishment of the new legislation about PPPs (3189/215 law). This law comprises the first organised attempt of the state to control the process of PPPs, given the fact that the 3 previous Greek PPPs were promoted with special legislative arrangements. The new framework is expected to cover all the spectrum of the process; thus, it includes the process of approval, the establishment of special Taskforces, all the obligations both of the public and the private sector during the bidding process and general guidelines on the completion of the concession contracts. The basic points of the new legislation are presented here, so that the reader could identify the areas of his interest and focus on them. However, from the research that was conducted, it is obvious that this law is viewed by some as insufficient and incomplete and consequently there are objections and proposals for improvements, like these of the TCG (chapter 4).

6.3 Conclusions

It would be wrong to examine individually this whole attempt of the adoption of PPPs by the Greek state, especially when considering the fact that the international experience in this field is important and can provide numerous answers and solutions. Thus, having as premise the international bibliography about the critical success factors for PPPs, and after an extensive research conducted in Greece that included conversations with potential participants in PPPs, chapter 5 includes a first appraisal of their progress in Greece. The general conclusion is that the conditions for the development of PPPs are propitious (legislation, central strategic planning, public and private sectors in favour, utilisation of international experience etc), however there are some factors that have to be studied and developed further, and these include the following:

- The centralised structure of the PPP Taskforce, which is a part of the Ministry of Finance. According to the international experience this generally makes sense, however in Greece for the time being this Taskforce is not independent from the central government and this in the long-term could lead to its dysfunction and exploitation for political purposes.
- Not all PPP projects are currently ideal for PPPs in Greece. The most suitable sectors are: Transport, Utilities, and Schools (only construction and maintenance). First of all the success of these projects must be secured, because it will determine the general fortune of PPPs in Greece and then the state should consider the expansion of this procurement approach into other fields.
- It is crucial, according to the international experience, that the contracts of the PPPs must be analytical, describe with every detail the output specifications of every project and include all the obligations both of the public sector and of the concessionaire. This area is expected to attract a lot of attention, because already people in Greece have expressed their concern about the capability of the new legislation to deal with it completely. A more detailed study of the PPP legislation of other countries could provide the solution.

- It is important for the Greek governments not to overestimate the value and the importance of PPPs. Every interviewee stressed how important is for the Greek economy that the Program of Public Investments remains the main means of development. Private finance must not replace public investments, but supplement them. In any other case the state will face multidimensional socio-economic problems (low growth rates, inflation, reduction of exports, increase of unemployment etc).
- In case of the transformation of an existing service previously provided by the public sector into a PPP (e.g. education, health), the state should secure the labour rights of the employees, with specific legal arrangements in the PPP legislation.
- The Greek state has to work harder in the provision of incentives to the private sector for their involvement in PPPs, by improving the credibility of the local authorities that in many cases suffer from bureaucracy and lack of organisation. This is an important factor, because the majority of the Greek PPPs include small and medium projects of a regional/local character.
- The better briefing of the public, because the support of the Greek citizens is a precondition for the success of PPPs. Moreover the government must inform on time and with absolute clarity the media and the press, in order to avoid any disinformation. It was suggested by the interviewees that the PPP department of the public sector should include a public relations office to deal with this issues.

6.4 Limitations of study

At the interview stage, the study faced the following limitations:

- The interviewees, despite the fact that they participated willingly in the research and that several issues were raised, provided no specific and detailed solutions.
- The fact that in the majority of issues discussed there was unanimity of opinions on behalf of the interviewees is first evidence that the relevant knowledge for PPPs is limited.

6.5 Recommendations

Based on the analysis of the research provided in the previous chapter, and the conclusions of the study, some further propositions for the practical application of the findings and suggestions for further research can be made.

- The further development of the legal framework. The future amendments to the law must be a product of a dialogue between the public and the private sector, something that until now hasn't been done.
- The international experience shows that not every project is suitable for PPP. Thus, the Greek state has to find ways to appraise the projects before the selection of the procurement route by constructing a relevant procedure (e.g. Public Sector Comparator in the UK).
- The enforcement of the Taskforces for PPPs with experienced advisors and consultants from the private sector and/or from other countries, and maybe with the establishment of a completely separate bureau for the control of PPPs, independent from the government (in terms of administration).

The research proved that all the interested parts of the procedure are waiting for the kick off of PPPs, but at the same time they are holding out for a more proper preparation and more complete information. All the interviewees expressed their measured optimism for the outcome of PPPs, that is moderated from the lack of experience and from the hesitation that accompanies every major socio-economic change.

This report attempted to study every aspect of the PPP topic in Greece. However, it became apparent that currently in Greece, PPPs are in a very initial stage. Consequently, any effort of study had to have a general form, contrary to other countries that have evolved the process and can focus on more concrete sectors. The research for PPPs has a long way before reaching safe conclusions, and as time passes and after the completion of the first projects the researchers will have in their disposal more material to study.

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APPENDIX A

✓ **Indicative** topics/questions that were discussed/posed in the open conversations with the participants in the research (every conversation followed a different route and focused on different aspects of PPPs, according to the *profession* and the *personal opinions* of each participant, however, they all had common basis):

General Questions

- What do you think about the PPPs as a procurement method for the provision of public services
- What are the reasons for the uptake of PPPs by the Greek government
- The experience and the degree of awareness of the Greek construction firms and financial organisations
- ...

Administrative Related Questions

- Is the Greek state in a position to take advantage of the international experience concerning PPP
- The structure and the operation of the Taskforces (recommendations)
- How the phenomenon of bureaucracy, that still characterises many Greek public authorities, will affect the public-private cooperation
- Appropriate models of PPP for Greece (concessions, DBFO etc)
- ...

Legislation Related Questions

- The new legislation for PPPs (completeness, objections, proposals)

Economic Related Questions

- Which regions of Greece will benefit the most from PPPs
- Which firms (small, medium, large) will benefit the most from PPPs
- The effect of PPPs in the Greek economy and the public debt
- The effect of PPPs on the Program of Public Investments (PPI) and on other areas of public investment (reallocation of public funds)

- ...

Technical Related Questions

- In which sectors PPPs will result in success
- Which projects are more suitable for PPPs in Greece
- Sufficiency of the construction and operation process in each case
(traditional procurement vs PPP)
- Entrance of international construction firms in the Greek market
(advantages – disadvantages)
- ...

Social Related Questions

- Do you feel that the Greek citizens will adopt the idea of private firms providing public service
- The role of the press and generally the media
- ...

✓ The following table shows which subjects were discussed with each one of the interviewees:

	Job title	Category of questions
1	Academic 1 (Construction Management)	General, Administration, Social, Economic
2	Academic 2 (Transport)	General, Administration, Social, Economic
3	Director of Public Authority	General, Administration, Technical, Legislation
4	Program Manager of a construction firm	General, Technical, Administration
5	Civil engineer (Large private firm)	General, Technical
6	Civil engineer (Medium private firm)	General, Technical
7	Economist (Bank consultant)	General, Economic
8	Member of the TCG	General, Administration, Social, Legislation, Economic
9	Lawyer	General, Legislation

✓ The following table provides information about the date and the location of the interviews:

SCHEDULE OF INTERVIEWS		
	Job title	Date and Place of interview
1	Academic 1 (Construction Management)	04 July 2006, Thessaloniki, Greece
2	Academic 2 (Transport)	05 July 2006, Thessaloniki, Greece
3	Program Manager of a construction firm	07 July 2006, Thessaloniki, Greece
4	Lawyer	11 July 2006, Athens, Greece
5	Economist (Bank consultant)	13 July 2006, Athens, Greece
6	Member of the TCG	14 July 2006, Athens, Greece
7	Civil engineer (Large private firm)	19 July 2006, Thessaloniki, Greece
8	Civil engineer (Medium private firm)	21 July 2006, Thessaloniki, Greece
9	Director of Public Authority	25 July 2006, Thessaloniki, Greece

✓ Due to confidentiality issues (raised by some of the interviewees themselves), anonymity is maintained for all of the participants. Detailed information about their occupation is provided below:

- Academic 1: Professor at Aristotle University of Thessaloniki (Polytechnic School, Civil Engineers Department, Project and Construction Management Section).
- Academic 2: Professor at Aristotle University of Thessaloniki (Polytechnic School, Civil Engineers Department, Transport - Transport Infrastructure and Regional Planning Section).
- Director of Public Authority: Director at the Contract Department of "Egnatia Odos", the public authority responsible for the construction of Egnatia Odos motorway.
- Program Manager of a construction firm: Program Manager in the road infrastructure department at the Greek construction firm "JP Avax".

- Civil engineer (Large private firm): Civil Engineer at the Greek construction firm “ETETH”. Currently employed at the road infrastructure department.
- Civil engineer (Medium private firm): Civil Engineer at the Greek construction firm “Aris Anthis and Associates” that constructs small and medium buildings in Northern Greece.
- Economist (Bank consultant): External Consultant of “Attiki Bank” for construction economics issues.
- Member of the TCG: Member – employee of the TCG (Thessaloniki Office), currently employed at the Financing Department.
- Lawyer: Lawyer currently employed at the legal department of the Greek construction firm “Athoniki ATE”.

APPENDIX B – GREEK PPP PROJECTS

B1) CONSTRUCTED PROJECTS

- **ATHENS INTERNATIONAL AIRPORT “ELEYTHERIOS VENIZELOS”**

This €2.6 billion project involved the development of the new Athens International Airport at Spata and provides an example where private sector funds have been used with EU grants to deliver infrastructure investment in Cohesion countries. The Greek Authorities and the European Commission had agreed within the framework of the Community Support Framework 1994 - 1999 (CSF II) to maximise private sector partnerships in the development of transportrelated infrastructure. The new Athens International Airport project consisted of a 30-year BOOT concession which received EU grants amounting to approximately €250 million or 11% of the project cost. An EIB loan of €997 million supported approximately 45% of the initial project cost.



Photo B1: Athens International Airport

The Hellenic Republic and a private consortium created a private company, Athens International Airport SA, to own and operate the airport for a period of

30 years. A grant from the Hellenic Republic amounted to €150 million and share capital amounted to €134 million, additional project financing came from commercial loans. A consortium led by Hochtief and also comprising ABB and TKT Krantz GmbH, undertook the construction project. Subcontractors, of which 80% were Greek companies, carried out 70% of the construction work. Work included the construction of a runway and taxiway systems for handling up to 65 aircraft movements per hour. The airport has an existing capacity for 16 million passengers and 220,000 tonnes of cargo a year, increasing to 50 million passengers a year after development. Construction was completed in September 2000 after 51 months and after 5 months of testing, the airport opened to the public on 28 March 2001. (Source: PricewaterhouseCoopers)

- **ATHENS RING ROAD “ATTIKI ODOS”**

The regional ring road of Athens is an urban motorway, with a length of 70 km with three lanes of circulation per direction and a lane of emergency.

The road is connected to the main road network of Athens via 26 underpasses. At the same time there are frequent uneven crossings enabling commuting from regions at either side of the road (re-establishment of continuity of city) as well as a complete adjacent road network.



Photo B2: Attiki Odos Motorway

The competition for the appointment of the preferred bidder was held via the Design - Build - Finance – Operate procurement route. An important aspect of the whole process was the existence of a progressive promotion of conventional engagements, as in the connection of English-French Channel Tunnel. This is not used in other projects and it constitutes a particular element of the process, as the contractor was exposed in disproportionate risks, given the conventional uncertainty up to the completion of lending conventions for four years (1996-2000).

With regard to the construction of Attiki Odos Motorway, particular interest have certain economic elements that indicate that in this particular case the public interest was not safeguarded as it was supposed. More specific:

The project "Attiki Odos", with a length of roughly 70 km was 'co-financed'. The **amount of the initial investment was 432 billions of Drs**, from which the state was forecasted to allocate 143,6 billions of Drs (33,24%), the contractor's equity funds were 53,6 billions of Drs (12,41%) and the loans with the public guarantees were 234,8 billions of Drs (54,53%). The exploitation of the project was granted for twenty years or earlier if the attribution of equity funds with the interest reached 11,5%.

With the completion of the project, the **construction cost reached the amount of 900 billions Drs**, roughly, plus the 300 billions of Drs that the state paid for expropriations. The attendance of equity funds remained at the same level of the initial convention, that is to say 53,6 billions of Drs, that represent however a percentage of 5,96% in the final cost, as also the loans of 234,8 billions of Drs with percentage 26,09%. The mixed annual income from the operation of the project, with a daily traffic of roughly 400.000 cars, amounts in 100 billions of Drs.

Comparing the initial forecast of 432 billions of Drs and the actual construction cost after the completion of the project (900 billions of Drs), we realise that:

- The participation of the public from 33,24% in the initial convention was increased in the 68% of the final cost.
- On the contrary, the attendance of equity funds of contractor of consortium from 12,41% in the initial convention was decreased in the 5,96% of the final cost, representing a negligible percentage.

- The same thing stands for the loans. From the 54,35% of the initial convention, their attendance fell in the 26,09%,

Conclusively, the term "co-financing" does not correspond to reality, since the equity funds of the consortium cover only 5-6% of the cost (Mpoura and Kalfakakou, 2006).

- THE RION-ANTIRION BRIDGE

The bridge RION – ANTIRION is located at the point where the following motorways meet:

- the motorway Patra – Athens – Thessalonica – Eyzonoi, that connects the three major cities of the country and constitutes a department of the European network of motorways.
- the western axis Kalamata – Patra – Igoumenitsa (Ionian Road).

An infrequent combination of unfavourable conditions composes the natural environment of the bridge:

- Depth of sea up to 65 metres.
- Seabed of decreased resistances.
- Intense seismic activity and likely tectonic movements.

Basic characteristics of the project are the enforcement of the seabed of the sea, the diameter of the pedestals that reaches the 90 metres (they are the bigger pedestals that were ever constructed for a bridge) and the completely hanging deck with length of 2.252 metres (world record).

The bridge has been designed to withstand a collision with a tanker of 180.000 tons, a speed of wind of 250 km/hour and an earthquake of more than 7 degrees of the Richter scale. The bridge has the possibility of absorbing shift up to 2 metres between its pedestals.



Photo B3: Rion-Antirion Bridge

The project was constructed using the Concession procurement route. The operation of the bridge passed on to the contractor company BRIDGE HM as soon as the project was completed. The Concession forecasts maximum limits of tolls, which the concessionaire has the right to determine. Moreover, he has the right to use his own policy for tolls, with cards for seasonal or regular users. The concession period will not exceed the 42 years from the date of the beginning of the Concession. After that period the ownership and operation of the project will pass on to the Greek State in order to undertake its operation.

The total cost of the project, with the evaluation of financing expenses at the duration of the construction period, amounts in roughly 800.000.000 €. The financing emanates from the following sources:

- 10% Participial capital
- 45% Financing contribution of State
- 45% Loan of European Bank of Investments, with the guarantee of a group of commercial banks

The concession company BRIDGE HM plays a major role in the legal shape of the concession. In general, BRIDGE HM has the total responsibility of the

project: the legal frame is based on its own responsibility and its exclusive aim is the completion of the project according to the output specification data (Bizanis and Sarafoglou, 2005).

The pecuniary flows at the duration of the construction period were shaped roughly as follows:

EXPENSES	MILLION €
Cost of manufacture	664.1
Control of study and supervision	16.0
Functional expenses	50.2
Financing expenses	72.4
TOTAL OF EXPENSES	802.7
RESOURCES	MILLION €
Private funds	68.6
Subsidies of investments	385.1
Loan EIB	349.0
TOTAL OF RESOURCES	802.7

Table B1: The pecuniary flows of the Rion-Antirion project
(Source Bizanis and Sarafoglou)

B2) FUTURE PROJECTS

- **PILOT PROGRAMME FROM THE ORGANISATION OF SCHOOL BUILDINGS**

The cooperation between the public and the private sector will be tested with the construction of 27 school units, as it was decided in the meeting of the Inter-ministerial Committee of Cooperation of Public - Private Sector (PPP) on the 14th of April 2006.

More specifically, the committee approved the subsumption of the "Organisation of School Buildings" (OSB) in the Law 3389/2005, which concerns the construction of 27 new schools with SDJT. The project will be announced in two competitions; 13 and 14 schools respectively. According to the plan, the private institutions - contractors will undertake the construction and the financing of the project, as well as the maintenance of these schools for a period of 25 years.

The OSB will provide annual payments to the concessionaires after the beginning of the operation of the schools. The amount of the payments will depend on the quality of the provided services of maintenance.

According to OSB, for these particular school units, the indicative budgeted cost of construction is 105.400.000 € and the cost of maintenance is 45.000.000 € for the period of 25 years.

In this sum there have not been included the cost of insurance as well as the cost of heavy maintenance of infrastructures, which is calculated in 20% of cost of construction. In any case, the final sum that the state will pay will be determined after the completion of the competitions for the preferred bidders.

The choice of the PPP procurement route aims at the reduction of the period of construction of the buildings, but also at the avoidance of direct government spending.

Total cost

From the economic data of OSB it results that for the following years the construction and upgrade of the school infrastructures in the entire the country will require the sum of 2,5 billions €. The total cost of all the required projects of OSB in the Region Attiki is 1.009 million €.

During the last years the Organism of School Buildings absorbs annually a sum of 200 millions € from the Program of Public Investments, and it is appreciated that with this rhythm it would need roughly 15 years for the completion of its program.

With the PPP, the Ministry of Education and the OSB estimate, that this period could be limited from 15 in 8 years.

Also the Inter-ministerial Committee approved the financing of legal and technical external advisors.

The cost for the advisors is estimated at a maximum limit of 1,5 millions €, that are within the international limits. According to the European Bank of Investments the cost of advisors oscillates from 1% to 7% of the capital value of a PPP project. (Source: NAFTEBORIKI newspaper, 15/04/2006)

- MAJOR MOTORWAY PROJECTS (Source: Interview of the Minister of Public Projects, 08/05/2006)

1) IONIAN MOTORWAY

The construction cost of the project is 1,075 billions € and the total cost is 1,392 billions €. The interest of the construction period, the cost of operation etc, are included in the total cost. The financing contribution of the state is 330 millions €, from which half will emanate from the European Union.

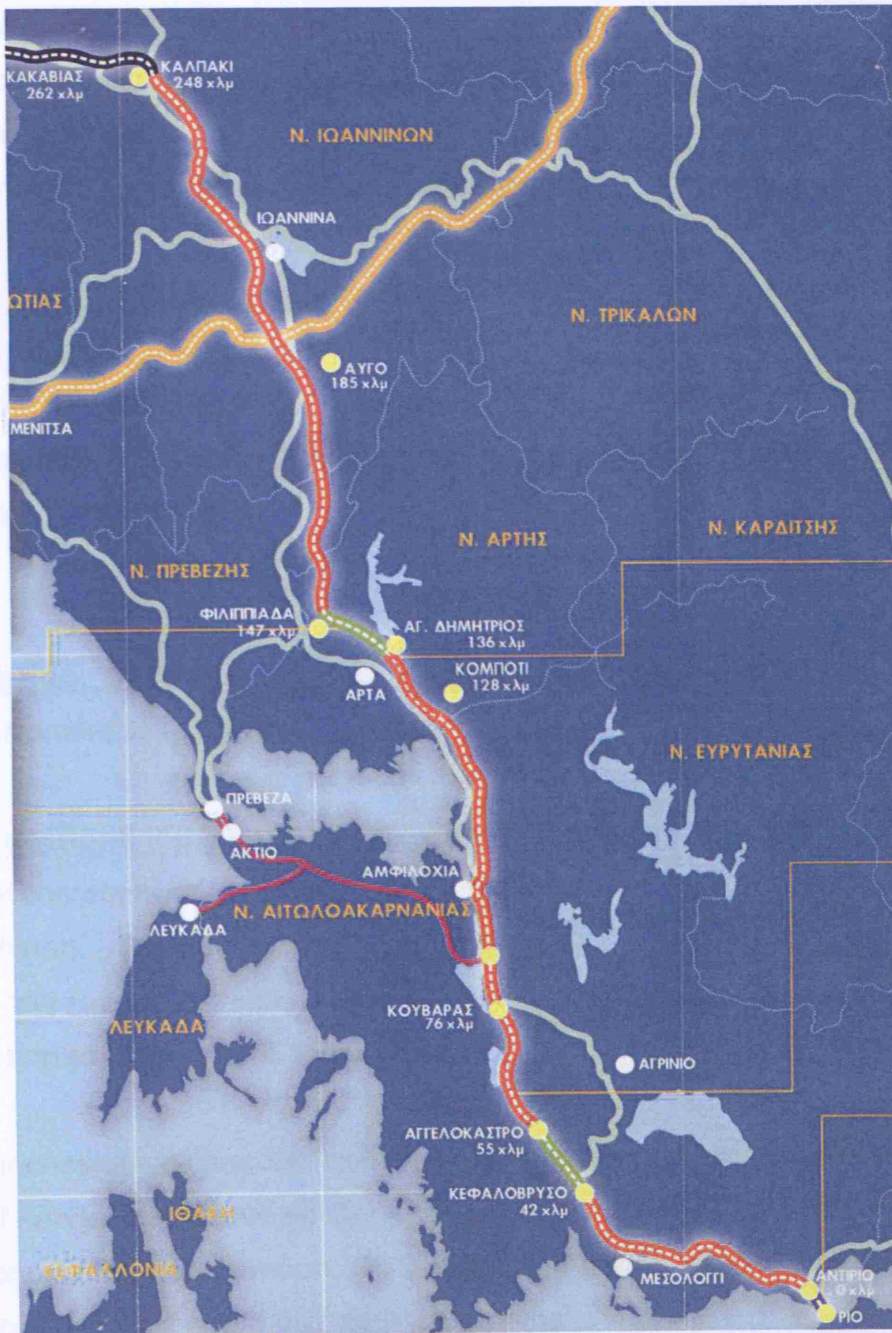


Photo B4 : Ionian Motorway

Technical characteristics of the project

The concession of the Ionian Road has a length of 382 km, with 42 underpasses and includes:

- a) the motorway "Ionian Road" with a length of 196 km from Antirio to Ioannina (Underpass with Egnatia Road).
- b) the section of the PATHE motorway, with a length of 175 km, from Metamorphosis to Scarfeia.
- c) the section of the PATHE motorway, with a length of 11 km, from Shimatari to Halkida

The motorway includes 2 lanes per direction with an additional emergency lane per direction.

More analytically, in the Concession are included:

1. The New Sections of Ionian Road 159,4 km, which the concessionaire will construct:

- a) Antirio – Agrinio, 42,9 km
- b) Completion of the semi finished section of the ring road of Agrinio, 13,5 km
- c) Agrinio –Arta, 53 km
- d) Arta – Egnatia Road, 50 km.

2. Existing Sections of the PATHE Motorway 163,8 km, that the concessionaire will improve.

3. The sections (58,8 km) that are constructed as public projects:

- a) Ag. Konstantinos – Kamena Vourla, 21 km.
- b) Shimatari – Halkida 11 km.
- c) The ring road of Agrinio, 20,7 km.
- d) The ring road of Arta, 6,1 km.

The concessionaire has the obligation to operate and maintain at a specified level of service the above sections.

The concession has duration of 30 years and the deadline for the completion of the construction of the project is 72 months.

At the same time, however, there are exclusive deadlines for the completion of certain sections of the project in the following way:

- a) First deadline of twenty (20) months, for the completion of the section Metamorphosis – Ag. Konstantinos of the PATHE Motorway
- b) Second deadline of thirty two (32) months, for the completion of the construction of the following sections of the PATHE Motorway: section of Iliki, section Ritsona – Thebes and the underpass of Varimpompi. Also deadline of 32 months is also forecasted for the completion of the semi-finished section of the Agrinio ring road.
- c) Third Deadline: forty (40) months, for the completion of the section Antirio – Agrinio.

2) KORINTHOS – TRIPOLI – KALAMATA MOTORWAY

The construction cost of the project is 844 millions € and the total cost is 1,044 billions €. The interest of the construction period, the cost of operation etc, are included in the total cost. The financing contribution of the state is 330 millions €, from which half will emanate from the European Union.

Technical characteristics of the project

The concession of the Motorway has a length of 205 km, with 26 underpasses and includes:

- a) The motorway Korinthos – Tripoli – Kalamata
- b) The motorway Leyktro - Sparta

The motorway includes 2 lanes per direction with an additional emergency lane per direction.

More analytically, in the Concession are included:

1. The New Sections 100 km, which the concessionaire will construct:

- a) Tripoli – Athenian, 13 km.
- b) Leyktro – Paradeisia, 6,4 km.
- c) Tsakona – Kalamata 34,6 km
- d) Leyktro – Sparta 46 km
- e) The second section of the Rabomati Tunnel and the underpass of Megalopolis in the section Athenian – Leyktro.

2. The Existing sections of the Korinthos – Tripoli Motorway 82,5 km that the concessionaire will improve.

3. The sections (22,5 km) that are constructed as public projects:

- a) Athenian (first section of the Rabomati Tunnel) – Leyktro, 12,5 km, that is already constructed.
- b) The department Paradeisia – Tsakona, 10 km.

The concessionaire has the obligation to operate and maintain at a specified level of service the above sections.

The concession has duration of 30 years and the deadline for the completion of the construction of the project is 54 months.

At the same time, however, there are exclusive deadlines for the completion of certain sections of the project in the following way:

- a) First deadline of 24 months, for the completion of the reconstruction and the improvement of the Korinthos – Tripoli section
- b) Second deadline of 24 months, for the construction of the new sector of the Artemisiou tunnel and the construction of the Tripoli - Athenian section
- c) Third deadline of 40 months, for the construction of the Tsakona – Kalamata section

- **OTHER APPROVED PPP PROJECTS (Source: Giannaros I. 2006)**

There have already been published 87 decisions of PPP projects for LOCAL AUTHORITIES in the country and the competitions for the engagement of Consultants of Support for these projects are in process. The financing of the Consultants emanates from the Programme THISEAS (paragraph 2.3, article 10, law 3274/2004 and decisions of integration of Committee, article 9, law 3274/2004). The total amount of the financing amounts in 8,5m €, and the indicative budget of these projects is 380,0m €.

The overwhelming majority of these projects is below 6,2m €. In addition there are many applications of future PPP projects in the "THISEA".

Categorisation of the projects

In the following section we have a separation of these 87 PPP projects, based on the structure and the particularities of the domestic market:

1. Refuse: Sector of great importance. It is estimated that in the following years new methods and technologies of management will be put into effect.

2. Water supply – Sewerage – Biological: It concerns the construction, the maintenance and the operation, of the relevant infrastructure. It could also concern individual networks of water supply, networks of sewerage, biological units of waste treatment, units of desalination and more generally each project or service of this category. This sector appears to have high demand in the region, but in many cases it faces enough problems due to lack of resources. An important advantage is that the degree of maturity of these projects in Greece is high enough.

3. Health – Social Solidarity: Concerns the completion, renovation and operation, of hospitals and corresponding centres of health, nursing homes for the elderly, special units of medical services, and each other work or service that is included in this category. It is considered as a sector of great importance, but with enough problems in matters of social acceptance and complex processes. Interest appears to exist for:

- **Hospitals,** Concerns the construction, the operation and maintenance of the building and the mechanical equipment,
- **Centres of Health,** for the undertaking of the maintenance and operation of the building installations, the equipment, and the services of support.
- **Nursing Homes for the elderly** for extensions, renovations, maintenance, services, as well as for safety.
- **Specialised Units of Medical Services**

4. Energy: Sector in dynamic development, with many private initiatives from local and international enterprises. It concerns aeolian parks, hydroelectric stations, installations of heat with gas, photovoltaic, treatment of mixed domestic waste (combustion SRF or RDF), and generally every other alternative source or soft production of energy.

5. Recycling: This sector concerns investments of recycling in a wide range of products aggravating for the environment (plastic, glass etc.)

6. Marine infrastructure: It concerns ports, piscatorial shelters, units of maintenance of ships of recreation, land basic infrastructure and more generally each work or service that has relation with the sea and the seashore.

7. Urban Reformations: It concerns reformations of urban centres, squares, pavements, parks of recreation and more generally each other installation that could have reciprocity for the investor.

8. Culture – Historical Heritage: It concerns the construction and operation of projects such as the Lyric Scene, Museums, Centres of Knowledge etc

9. Construction of parking stations: It concerns the construction and operation of parking stations above the ground or underground, in regions with increased traffic and includes other investments (malls, or spaces of recreation, etc)

10. Accommodation of Public Services: It concerns the transfer of basic public services, as the headquarters of Forces of Safety, LOCAL AUTHORITIES, ministries etc.

11. Education: It concerns activities of the Organization of School Buildings (OSB), the universities and more generally each other work or service that could belong to this sector. Mainly it concerns the construction, maintenance and operation of basic and supplementary buildings.

12. Transports –Logistics, etc

13. Operation of public assets for tourist and other purposes: As it appears from the available data, the Region Attiki with 16 projects concentrates the 18,4% of the approved projects, the Region Thessaly with 15 projects the 17,2% (73,4% concern projects at the sub region Magnesia), and the Region of Central Macedonia with 14 projects the 16,1%. **In total the above three Regions assemble the 51,7% of the approved PPP projects (45 projects out of 87).** The remaining regions have smaller participation, while there are also Regions (for example Crete) that have submitted only one project. Regarding the structure of these projects, 40 of them (45,9% on the total) concern developments of public assets mainly for tourist uses, and 20 of them (22,9% on the total) concern underground parking stations; that is to say, these two categories constitute the 60% of the approved projects. (Source: I.Giannaros, 2006)