Hybrid PPPs:
Levering EU funds and private capital
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I Introduction

Background

1 The “Regional Forum on Governance of Public-Private-Partnerships” was a joint initiative by the Government of the Czech Republic, represented by the Ministry of Finance, and the World Bank Group. The Forum was held on February 27-28, 2004 in Prague, the Czech Republic, to provide a platform for sharing international lessons of experience. The Forum attracted primarily Ministry of Finance officials from the New Member States, the remaining accession countries and other countries in the region with an EU perspective.

2 Its particular goal was to discuss emerging good practice and broad lessons as to the appropriate institutional arrangements and organizational structures for the fiscal governance of Public Private Partnerships (PPPs).

3 Internationally, PPPs have demonstrated that sharing risks between private firms and the state can provide strong incentives for services to be delivered more effectively to users and, thereby, more efficiently for taxpayers. However, lessons learnt so far highlight the need for a robust governance framework, to ensure that PPPs provide value for money overall, are affordable in the long-term, and entail appropriate risk transfer. Otherwise, there is a risk that PPPs may be pursued because of short-term fiscal constraints or ephemeral accounting reasons, with the consequent risk of exposing governments to unaffordable and perhaps unexpected long-term liabilities.

4 PPPs are not financial or accounting devices; they simply represent a contestable route to the procurement of long-term infrastructure services. Best practice means that PPPs should always be considered as an option for the provision of a wide range of infrastructure services.

5 It has long been recognised that realisation of the benefits of membership of the EU entails substantial commitment of resources to upgrading the infrastructure of new and aspiring member countries. To that end, the EU provides budgetary support in the form of specific grants to defray approved infrastructure investment by such countries.

6 At the same time, membership imposes the obligation to observe the Maastricht fiscal criteria. Squaring the circle of fiscal constraints and major public sector investment objectives induces countries to seek to maximise absorption of EU grants as a target in its own right, and to pursue PPPs as a last resort for budgetary reasons, on the grounds of their potential for off balance sheet accounting treatment.

7 As a result, many governments have, by default, followed a two-pronged approach: supplementing EU grants with public, budgetary funds; pursuing PPPs that rely mostly on user fees (through concessions) or that combine private finance with budgetary funds rather than EU funds.

8 This means that, on the one hand, PPPs are not seen as a mainstream route to infrastructure provision, and, on the other, PPPs are frequently applied inappropriately - early efforts to adopt PPPs for motorway projects in the Czech Republic, Hungary, and Poland have not been successful in delivering results, and consequently tarnished the public perception of PPPs..

9 Despite repeated encouragement by the EU Commission for greater use of private funding as a complement to EU grants, participants at the Forum felt that lack of information and a dearth of successful precedents tends to discourage the use of PPPs in sectors where EU funds are a dominant source of external funding, such as transport and municipal services.
Whether there are genuine barriers to the use of EU grants in PPPs, termed here “hybrid” PPPs, or their scarcity reflects more systemic issues that new and aspiring member countries have with the PPP concept, it is clear that best practice adoption of PPPs and efficient use of limited EU grant resources requires PPPs and EU grants to interoperate. That is to say, unless hybrid PPPs can be seen to work successfully in meeting member government objectives, then there will be barriers to the use of PPPs and desperately needed infrastructure provision will be significantly lower than could otherwise have been achieved.

**Objectives and scope of work**

The objective of this assignment has been to contribute to the discussions regarding the promotion of hybrid PPPs, primarily by the analysis of a small, select sample of such hybrid PPPs that have either successfully reached financial closure, or have failed to reach financial closure for reasons associated with the involvement of EU grants. The sample drew on projects located in Ireland, Portugal, Spain and Greece (Cohesion and Structural Funds), or in the accession countries (ISPA).

The Report details several case studies and their analyses. They are a basis for the key recommendations for improving the hybrid PPP process and enhancing its effectiveness.

Below we list the key tasks included in the scope of the assignment and the chapters where these tasks are addressed:

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**Methodology**

We performed our work in two stages:

**Stage I**

Stage I was intended to provide an overall overview of the concept of hybrid PPPs.

We studied publicly available documents and opinions regarding the history of hybrid PPPs. During January 2005 we held telephone conferences with experienced PPP practitioners from within the PwC network and from the EU/PPP financing community\(^1\), including EU15 countries (with a greater focus on cohesion countries) and the New Member States.

We have not sought to establish the reliability of these sources or verified the information so provided.

As a result of Stage I we prepared our Interim Report. The Interim Report stated some key findings, such as the fact that there are very few examples of hybrid PPPs in the EU, and identified significant obstacles which may be faced when preparing and implementing hybrid PPP projects. At that stage we also identified transport and municipal infrastructure projects that had been carried out under hybrid PPP structures involving both the public and private sectors, and including EU grants in the form of Cohesion, Structural and ISPA funds.

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\(^1\) List of interviews attached at Appendix II
Stage II

19 During August and September 2005 we selected six projects from the list of projects identified in Stage I and prepared an extensive transaction analysis of them.

20 The selection criteria used to identify these projects were as follows:

- Sector: transport or municipal infrastructure (including roads and environmental projects)
- Size: total project value
- Availability of information on the project
- Outcome: examples of both perceived successes and failures
- Country: examples of EU countries (EU 15 and NMS) and Accession Countries

21 The following projects were selected:

- Athens Ring Road (Greece);
- Perpignan – Figueras Rail Link (France & Spain);
- Athens International Airport (Greece);
- N1 / M1 Dundalk Western Bypass (Ireland);
- Constanta Water and Wastewater (Romania); and
- Poznań Water (Poland).

22 Reviewing and comparing these cases allowed us to analyse hybrid PPPs which:

- Cover transport and environmental infrastructure;
- Involve Structural Funds, Cohesion Funds, ISPA or TEN funds;
- Focus on “old” Cohesion Countries (Spain and Greece), the New Member States (Poland) and the Accession States (Romania);
- Include successful and failed projects; and
- Apply different PPP structures (classic, hybrid and “ring-financed” or divisible projects)

23 In order to obtain optimal coverage of the perspectives, views and opinions, from both the public and private sectors, we conducted interviews with a wide group of people representing the following institutions:

- Public Sector Perspective: Ministries of Transport, Infrastructure Development Authorities, Municipal Utilities
- European Union Perspective: the European Commission including DG Regional Policy
- Financiers: EIB and EBRD
- Private Sector Perspective: Concessionaires, Financial Advisors, SPVs

24 The list of individuals interviewed is attached at Appendix IV to this Report. It should be noted that some of our interviewees wished not to be named and therefore remain anonymous. Additionally, some of our target interviewees preferred to answer the questions in writing. It should also be noted that in several cases our preferred interviewees declined to be interviewed, though some of them agreed to review sections of our Report and comment thereon. Given the age of some projects it was not always possible to interview all persons who played a key part in preparing and implementing the projects. We believe however that through the interviews conducted we gained sufficient knowledge to enable us to draw out key lessons and conclusions.

25 Our interviews were conducted on the basis of questionnaires prepared for each group of interviewees separately and distributed to them prior to the interviews. This enabled us to obtain comparable information for analysis. The questionnaires are attached at Appendix VI.
Report Structure

The Report opens with Chapter I, an introduction detailing the objectives, methodology and structure of the Report. Chapter II, an evaluation of findings and recommendations, contains a summary of perceived obstacles and our recommendations for further steps that we have gathered in the course of our general analysis (Chapter III) and analysis of case studies (Chapter IV). Chapter III is a general analysis of existing hybrid PPPs and the current EU legal framework, as well as the legal and institutional framework in the Member States. Chapter IV contains the analysis of six case studies of completed, ongoing or abandoned hybrid PPPs.

There are six appendices at the end of this Report. Appendix I is a glossary of the terms and acronyms used in this Report. Appendix II contains a summary of the case studies we analysed. Appendix III is a list of the individuals we have interviewed in the course of our work. Appendix IV is a list of the information sources and documents used, the interview questionnaires form Appendix V and Appendix VI goes into further detail on the proposed changes to EU grant rules for the next programming period.
II Findings and Key Recommendations

Definitions

Definition of PPP

A prime contributor to the confusion surrounding the issue of hybrid PPPs is the extent to which participants are frequently at cross-purposes over what is meant by a PPP. And to be fair, there is no single agreed definition generally available.

Let us consider two potential definitions:

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<th>South Africa²:</th>
<th>PwC suggestion:</th>
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<tr>
<td><strong>PPP defined in law as:</strong></td>
<td><strong>A PPP is where:</strong></td>
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<tr>
<td>• A contract between government institution &amp; private party</td>
<td>• The public sector organisation specifies a service in boundary or outcome terms.</td>
</tr>
<tr>
<td>• Private party performs an institutional function and/or uses state property in terms of output specifications</td>
<td>• The performance of that service is measured in terms which are meaningful and relevant to the organisation and/or its users.</td>
</tr>
<tr>
<td>• Substantial project risk (financial, technical, operational) transferred to the private party</td>
<td>• Payment for the service is broadly proportional to the measured performance of the service.</td>
</tr>
<tr>
<td>• Private party benefits through: unitary payments from government budget and/or user fees.</td>
<td>• The contract is awarded following an open, transparent, and thorough competition.</td>
</tr>
<tr>
<td><em>The South African Constitution provides:</em></td>
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<td>• “When an organ of state … contracts for goods or services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost-effective.”</td>
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Definition of Complementary PPP

32 The foregoing PPP definitions make it clear that user fees and unitary payments are complementary means of paying for the performance of the service. The service provider has the usual market incentives to maximise revenues from the users by providing value (user benefits) for money (user fees), whilst the PPP contract offers payment incentives to provide the required service for all users.

33 This is such an obviously beneficial approach that one would reasonably think it was the standard template for PPP structures. However, there are relatively few examples of such “complementary” PPPs to date, so that, by default, governments have followed a two-pronged approach:

- For projects free at the point of use, the public sector contribution is entirely by way of the unitary payments under the PPP contract;
- For projects involving user fees, the public sector contribution is often primarily by way of capital grant.

34 If we take the UK as an example, early light rail schemes in Manchester\(^3\) and Croydon took the public sector contribution by way of capital grant, whilst the more recent Nottingham scheme was a fully complementary PPP.

35 Where such upfront capital grant contributions constitute the bulk of public financial support, they may undermine, the very incentives that PPPs seek to promote, i.e. accountability and payment for services or service availability. This has been recognised by the World Bank, the EU Commission, and Ministries of Finance, so that strenuous efforts are now being made to encourage the use of complementary PPPs.

36 Of course, the adoption of a complementary PPP model by the contracting public sector entity then in turn demands a complementary approach to budgetary support by a higher layer of government. In the same way that the contracting entity must make long-term provision to meet their contractual obligation to make unitary payments, then, ideally, so should the higher layer regarding their budgetary support.

37 In the UK, central government funds 75% of local authorities’ expenditure in general. In order to encourage the adoption of PPPs by local authorities, the government offers in principle to fund 100% of the capital element of a PPP by way of “PFI Credits”, which are spread over 25 years.

38 So best practice would dictate the use of complementary PPPs at all times, together with a complementary approach to budgetary support.

Definition of Hybrid PPP

39 Best practice is one matter; budgetary processes of governments subject to democratic control another. It is frequently the case that financial support is provided by way of a vote to put so much money aside for that purpose, to be spent over a medium-term horizon.

40 This is the case with the EU and its structural and cohesion funds. The global amounts of these funds are negotiated at the outset of each 7-year planning cycle, as are the qualifying conditions. Whilst a generous period is allowed, there is no doubt that the funds have been time-limited.

41 Historically, therefore, the EU budgetary support available to cohesion countries has been in the form of capital grants\(^4\). So PPPs that have proceeded so far with EU funding have done so on the basis of capital grants. The effect of this is illustrated in diagram (a) below. It may be seen that the impact of the EU capital grant is to reduce the private sector’s funding requirement, with a consequent saving in the unitary payment.

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\(^3\) Indeed, Manchester successfully sought capital grant funding for their recent proposed extensions.

\(^4\) It is fair to say that capital grants have arguable attractions from an accountability perspective, especially for the EU, which is inevitably somewhat distant from the contracting public sector entity.
The commonly used method, where EU funds are applied at the beginning of a project against capital expenditures. With the lower capital expenditures, future payments made to the private partner (e.g. availability payments or shadow tolls) are lower as well.

However, it should only be a matter of mathematics that would enable a capital sum to be commuted into an annual payment, and amendments to the rules are being progressed to enable this to happen. In future, therefore, EU budgetary support may well be in the form of annual payments during operation of the project, rather than capital grants during construction. The effect of this is illustrated in diagram (b) below. It may be seen that the private sector’s funding requirement is higher, with a consequent increase in the unitary payment, which is then partly met by the EU funding.

The other theoretical method of using EU funds would be to supply a revenue stream during the life of the project, contributing to each payment.

PPPs combined with EU funding are termed “hybrid” PPPs in this report. This term is neutral as to the means by which that EU funding is delivered to the project. However, it is true to say that all hybrid PPPs to date (and all the case studies) have involved capital grants. The EU is not unique in this: the combination of capital grants and PPPs is arguably the norm when the EU is not involved, and such PPPs have been successfully delivered.


**Observations**

**Public funding the only option considered**

46 For the vast majority of public infrastructure projects, the only option considered is public procurement funded with public (either national or EU) resources.

47 Factors that are preventing greater leverage of private funds in public infrastructure projects include the following perceptions:

- There are sufficient public funds – this perception is especially noticeable in NMS;
- EU funds are free – moreover, the “use it or lose it” mechanism applied to EU funds puts a lot of pressure on national and regional governments to focus their attention on absorption rates. Indeed the EU funds often compete with PPPs;
- Private funding is expensive, i.e. the potential value available from the private sector is not understood or recognised.

**EU funds seen as not suitable for co-financing**

48 When participation of private finance is considered, EU funds are rarely considered as a suitable method of co-financing.

49 Whilst examining the factors preventing the combination of PPPs and EU funds once private sector involvement has been chosen, we have concluded:

There are no insurmountable barriers to the use of hybrid PPPs in the EU15, the New Member States, or the Accession countries.

There are some significant obstacles in reality and in perception. They may not prevent the use of hybrid PPPs, but they are a powerful deterrent.

50 In many cases hybrid PPPs have been developed only as a last resort. The first choice for most projects remains public funding (national and EU). Only when it becomes clear that public funding will not be sufficiently available is private sector involvement considered. Frequently, 100% user fee based structures will be investigated before hybrid PPP structures are explored.

**Pioneering attitude required**

51 New Member States need to be pioneers to embrace and be creative with alternative funding and drive this initiative forward due to:

- A greater need to bridge the infrastructure gap to make their economies competitive;
- Relatively high level of EU grants available; and
- Stricter EMU accession fiscal constraints on the public sector.

52 The existence of the infrastructure gap, especially in NMS, is a reality. The Van Miert Report\(^5\) noted particular deficiencies in the transport sector, where combining the national networks under the auspices of TEN-T would take almost 20 years at the current rate of investment even in the EU-15, and longer in the EU-25. Both national and EU funds are finite and needed in many sectors. The wide use of PPPs presents itself as a possible solution. EU grants and private funds, combined as hybrid PPPs, together with private sector expertise, can contribute towards the optimisation of resources.

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\(^5\) High Level Group on the Trans-European Transport Network Report, 27 June 2003
Potential obstacles

Potential obstacles to the development of hybrid PPPs can be divided into two groups:

1. Those of a conceptual nature, including the political environment and a lack of knowledge and previous experience;
2. Those of an institutional / procedural / administrative nature, including timing issues and EU and national-level procedures and policies

Conceptual obstacles

Maximising absorption rates as an objective

Maximising the overall amount absorbed of available EU funds is naturally a priority at the national government level that dominates any other consideration. Frequently, this objective is translated into an over-emphasis on large projects that can attract very high rates of co-financing. Where hybrid PPPs are seen to have lower rates, this is perceived as a major disadvantage. With time, in NMS it will become clear that hybrid PPPs allow absorption of EU funds across a much larger number of co-financed projects, allowing more infrastructure to be built. Of course, to a significant extent this is a capacity-building problem: a greater ability to pursue more projects, and more PPP projects should help to remove this as a conceptual problem.

Lack of precedents as a deterrent

When the initial allocations of Cohesion and Structural Funds were made, the PPP concept itself was still relatively untried, even in the UK. The only precedents were therefore the major revenue-generating projects, such as the Channel Tunnel and the Great Belt, and so the two-pronged approach to EU funds and PPPs is quite natural. The consequent lack of hybrid PPPs compared with the alternative models further exacerbates the emphasis in favour of traditional tried and tested financing structures. Even though hybrid PPPs have been implemented, decision-makers are not familiar with these cases and are therefore unable to learn from them.

Institutional obstacles

Timing issues

Budgetary period

EU grants should be disbursed within the budgetary period of seven years, while infrastructure projects may span two budgeting periods. This creates uncertainty concerning the availability of funding for projects structured as hybrid, and increases risk for both the public and private sectors. While the EU has proven flexible on this subject throughout the current budgetary period (2000-2006 and 2004-2006 for NMS), this flexibility has not been formalised, leaving no clear guidelines for future hybrid PPP projects.

In some cases this obstacle may be overcome by properly structuring the transaction, where EU grants may be allocated against the initial phases of the project to reduce later public payments during project life and do not need to be spread over the project life.

N+2 rule

The purpose of the N+2 rule is to introduce greater discipline in the timely implementation of projects.

In the case of ERDF programmes, when a financial commitment is made against a programme, the Member State has to submit payment claims to the EC for the total amount committed before the end of the second year after the commitment is made. If the full amount of the commitment is not claimed by this date, the outstanding amount is de-committed from the programme.

The N+2 rule in the case of the Cohesion Fund and the TEN fund is different. If implementation of the project has not commenced within two years from the date of its expected start (as indicated in the decision granting assistance, or the date of its approval if later) the whole assistance package can be cancelled.
For ISPA projects the N+2 rule refers to the date on which the decision on co-financing was made. According to this rule the assistance committed is cancelled if implementation of substantial works does not begin within two years from the date of signature by the EC of the Financial Memorandum granting the assistance.

Hybrid PPPs are more complex than traditional procurement. Decisions being protested, there may be protracted financial negotiation and closing. All this may involve a longer period of project formation, so the N+2 rule represents higher financing risk for the public sector (and for the private sector in the absence of underwriting of this risk) as a grant may be reduced or withdrawn when the project does not start on time.

It is advisable to apply for the EU grant after the PPP’s conditions and demand for EU funding are known and agreed - after the negotiation stage and before the contracting. The public sector may have to underwrite the EU portion of the project in order to engage the private sector before the EC makes a decision concerning its willingness to provide co-financing.

Procedures and policies

Whole life costing

Those hybrid PPPs implemented in the past have exclusively taken the shape of upfront capital contributions: grants from both Structural and Cohesion Funds are usually paid against costs of the construction phase (provision of services, supplies and works for the realisation of the physical infrastructure). This model of hybrid PPP has undermined the principle of whole life cost optimisation, since the grant is paid in respect of capital expenditure only. Where governments have anticipated a high rate of grant, they have been deterred from going down the PPP route in the first place, since expected benefits form doing a PPP that way do not clearly outweigh the transaction costs.

Institutional and legal framework

There are some NMS which do not have appropriate PPP regulations in place, and in others PPP legal frameworks have only recently been adopted. The absence of PPP law or special regulations (for example, concerning the transfer of risks) in countries under a civil law regime (as most NMS are) will inevitably cause initial problems and delays.

In countries where PPPs are extensively used, specialised PPP units (e.g. Partnerships UK in the UK) play a great role in promoting and sharing knowledge. Such PPP focussed units are uncommon in the New Member States, and if they do exist, they do not have sufficiently deep knowledge of EC procedures to structure PPPs.

EU Tender Procedure

The EC does not have a comprehensive procurement framework for PPP projects. The tender procedure for choosing the private sector partner has to be structured in conformity with the EU Treaty principles (transparency, equality of treatment, proportionality and mutual recognition). The EC’s Green Paper describes how the rules and principles deriving from Community law on public contracts and concessions apply when a private partner is being selected, and for the duration of the contract for different types of PPP. The detailed structure of the PPP tender has to be included in the EU financing application.

The choice of the procurement procedure should be completed at an early stage of the project and should be agreed with all the co-financing partners, including the EC, particularly when there are doubts as to whether the procurement procedure is constructed according to EU Treaty principles. The purpose and organisation of the tender should be clearly communicated to the private sector to dispel its fears about the fairness of the process.

Clawback

An EU grant can be withheld or clawed back if the project fails to meet contracted deliverables defined in absolute terms (e.g. expected travel time savings for transportation projects). In PPPs, the performance risk is transferred to the private sector, which is to deliver the defined outputs measured as quality and availability of service. Thus, the features of PPP and EU grants are similar. However, the outputs expected are different, and so the additional requirements for EU grants increase the risk
for investors and lenders. First, the private sector would have to deal with penalty and/or termination clauses relating to PPP requirements. Second, the whole of the EU grant could be withdrawn if the greater macroeconomic objectives are not met. The claw back risk is almost always transferred to the public sector through underwriting (as long as control of this risk vests with the public sector).

70 The risk can be significantly reduced by ensuring that the project deliverables are realistic, clearly defined and agreed with the parties concerned, including the private sector, at the time when the grant decision is made.

Significant modification

71 The EU rules on Structural Funds state that in case of any significant modification to the project, during the period of five years from the date of decision of the competent national authorities on the contribution of the Funds, the EU may require an immediate repayment of all grants.

72 The EC in implementing this provision wants to ensure that expected objectives and deliverables of the project are maintained during and after project implementation. In addition the EC is concerned that non-transparent step-in arrangements might cause inequality of treatment, as the lender or its nominee becomes the contracting party without a formal competitive process.

73 This can be a problem in the case of project difficulties (for example, redesign of the project solution due to mistakes in the original design, unforeseen circumstances which may accrue during construction period, taking over of the construction site due to insufficient mobilisation of the contractor, bankruptcy of the work contractor and others) and also an issue when constructing the financing arrangements (due to possible difficulties with exercising the lenders’ “step in rights”, which potentially fall foul of the “ownership” rules in the relevant EU legislation), though regulations and practice on this point are unclear.

74 The risk can be mitigated by dividing the project, with that part more likely to be modified being financed through a classic PPP. The more stable part would be financed through a hybrid PPP. This solution, however, does not eliminate the risk and exposure and will not be appropriate in all circumstances.

Monitoring

75 According to the EU rules the EC has no direct role to play in the implementation of a project from the perspective of the management, monitoring and quality of the project. When the project is approved for financing from EC sources, its monitoring is limited to checks of physical progress. However, the grant may be reduced if at a later stage the EC acknowledges that the eligible cost has been lower than reported (as was the case in the Athens International Airport).

76 This effectively places the burden of monitoring the construction works on the national authorities. If the EC co-financing is reduced, national authorities will have to provide the additional funding as they are usually underwriters to the private sector for EC co-financing grants.
Recommendations

We summarise below our recommendations, which apply to both the micro (projects developed by local authorities) and the macro levels of the EC and the EU Member States. The diagram charts the obstacles we have identified and how our recommendations relate to them.

The key conclusion of our Report is that public sector decision makers need a clear and comprehensive framework for assessing projects and identifying the most suitable financing options. Such an assessment would allow identification of projects as potential hybrids at an early stage, rather than through “trial and error”.

The EU needs to improve the quality of project appraisal and formation and help stimulate the development of a healthy pipeline of projects with benefit-cost ratios above 1.0. It should also support the development of PPPs at EU and national levels through information dissemination and re-examination of the rules concerning the provision of funding and its use within set timescales.

If hybrid PPPs are to be used effectively, especially in NMS, support from national governments and the EU is essential. Public sector resources are scarce and should therefore be applied only to those projects that are critical to the development of the economy and involve a significant financing gap.

In order to promote hybrid PPPs, there is a need for a clearly defined set of actions in various areas of intervention for the EC and the EU Member States as summarised below:

Acceptability

Given the significant resources required to develop infrastructure and recognising that public sector resources are scarce, it is of paramount importance that there is a greater acceptability of private sector involvement in public infrastructure projects. It is important to build this acceptability through actions outlined below.

Fight the “EU money is free” syndrome – Value for Money

The government perception of EU funds as “free money” can lead to non-optimal use of public funds in projects for which private finance was available and provided VfM. It is possible that with hybrid financing structures more risk is transferred to the private sector although the price is high and the...
public sector is better equipped to manage this risk. Appropriate measures should be introduced to ensure that EU grants are not used for sub-optimal risk transfers.

VfM for the public sector in a PPP is obtained by sharing the risks with the private sector, as PPPs are based on the premise that risk is transferred to the party which is best placed to manage, and hence minimise, that risk. There is a point beyond which the allocation of risks to the private sector is no longer profitable for the public sector (optimal transfer of risk), as the private partner requires a substantial payment for accepting this additional risk (see diagram).

As the public contribution may be significantly co-financed by the EU, the public sector will be tempted to pay a bigger contribution to the private sector for taking up risks beyond the optimal transfer point, thus distorting the VfM analysis.

The second graph shows a comparison between project 1 with optimal transfer of risk and project 2 with risks transferred beyond the point of optimal risk transfer. In the second situation the overall public sector risk-adjusted cost is higher, although that supported by the national government is lower.

**Improve understanding of benefits and risks**

84 The positive aspects of hybrid PPP schemes (e.g.: additional capital, private sector management and implementation skills, better quality of services offered, better sharing of risks and optimal use of resources) need to be better communicated. The advantages of hybrid and classic PPPs over traditional procurement should be emphasized through a communication programme of workshops, seminars and capacity building programmes. This message should be balanced by drawing attention to risks and how they can / should be addressed to ensure overall success.

85 In order to establish a knowledge management tool to be used by project sponsors, we highly recommend that a Knowledge Task Force is created at the level of the European Commission. The Task Force would develop a database of significant PPPs, including hybrid PPPs, promoting best practices and providing model documentation for use by national governments and their agencies.

**Develop pilot projects and promote success stories at EU and national levels**

86 Success stories of hybrid projects can positively influence the private and public sectors. We recommend the selection and launch of a number of pilot hybrid PPP projects. It is important to choose well prepared projects with strong support of committed parties (both the private and public sectors) to demonstrate how these models could work successfully. These success stories should then be promoted through a targeted campaign addressing all potential users of hybrid PPP solutions, possibly in cooperation with the Knowledge Task Force.
Capacity Building

*Traditional procurement – challenge*

National governments often view PPPs as a last resort, when all other routes have been tried, rather than a preferred, or even optional, procurement route. The decision-makers are often over-optimistic (mainly due to inexperience) in their assessment of funding requirements and funding availability (and, of course, outturn costs). PPPs are much more demanding in terms of project formation, but then projected costs and benefits will be much more certain and deliverable.

There needs to be a process of challenge at a very early stage of projects intending to proceed using traditional procurement. The feasibility of the PPP option must be assessed against a realistic projection of the traditional alternative, as with the Dutch Public Private Comparator.

*National capacity-building programmes*

Capacity building programmes, specifically emphasising benefits from hybrid PPPs and addressing issues that need to be addressed, should be developed. These should be aimed at the regional and local government as well as national levels, especially in the Cohesion countries, Structural Fund regions and the Accession countries. In NMS, in order for PPPs and hybrid PPPs to work effectively, appropriate skills need to be developed within the private sector.

National authorities have to demonstrate, and if necessary build, the relevant institutional capacity to monitor operations financed by EU assistance, with an emphasis on the eligibility of expenditures. This must be combined with the ability to work effectively, within the EU framework, with the private sector.

*Decision tree for assessment of the suitability of hybrid PPPs*

Hybrid PPPs should be promoted in cases best suited for this type of financing, and decision makers (both national and regional) should examine the application of the hybrid PPP model on a case by case basis. The decision tree below takes into account the additional benefits resulting from the participation of the private sector, such as management skills and increased efficiency, which influence the decision on whether any PPP is an optimal way forward.
We do not recommend that “hybrids” per se are promoted over other methods of financing. They should however be considered, together with the alternative options, at the outset of the project.

Appreciating the benefits of revenue generating projects

The drive towards high absorption rates of EU funds at the national level encourages focus on projects with high percentage rates of EU co-financing. Projects which generate “significant” revenues (i.e. candidates for PPPs and hybrid PPPs) qualify for Structural Funds co-financing at a maximum of 50% of eligible cost, compared with a 75% (80% in special cases) maximum level for projects that do not generate these revenues. In the case of the Cohesion Fund, a reduction of EU grants to revenue-generating projects is required and should be calculated on the basis of the expected revenue level. This reinforces the tendency to apply for EU funds for non revenue-generating projects as opposed to the usually revenue-generating PPPs, as fewer projects need to be prepared, submitted and accepted for co-financing in order to fully absorb the national allocation of Structural Funds or Cohesion Funds.

This is an entirely negative approach that emphasises an input-based objective (absorbing EU funds) over an output-based objective (maximising infrastructure provision for a given amount of EU and national government resources). Revenue-generation, seen in that light, can only be of benefit to the country concerned. However, in order to adopt a positive approach, it will need to have sufficient skilled staff in the PPP centre to pursue all the additional projects.

Hybrid PPP step-by-step implementation guide

Considering the organisational complexity and relative newness of the hybrid PPP concept, there is a strong need for guidelines for project developers. The private sector has far more experience and specific knowledge of the PPP-related issues than the public sector. Accordingly, there is a need for step-by-step guides for public authorities interested in developing PPPs. These guides have to take into account various legal frameworks and other country-specific issues.

Institutional Measures

Clarify regulations in order to reduce the risk for the private and national actors

A stricter legislative approach to PPPs may be neither practical nor desirable. The approach taken by the EU should be one of interpreting and clarifying the way that existing (and future) rules and regulations interact with PPP procurements and their development.

EU guidelines should be improved by clarification of the EU Directives and Regulations concerning the provision of EU Funds for infrastructure projects. This will reduce problems of interpretation for the private and public sectors, and increase the take-up of hybrid PPPs. The development by the EC of a guidance document clarifying the uncertainties surrounding some provisions (significant modifications, N+2 rule, state aid, acceptable profitability levels etc.) is essential.

Additionally, special PPP centres of excellence should be established within national governments, working with an EU PPP Knowledge Task Force. These units together would support:

- The provision of answers to questions posed by project sponsors;
- Publishing of EU interpretations of specific regulations; and
- The provision of assistance to Member States to ensure compliance with EU requirements.

The issue of significant modification requires more clarification from the EC, as the definition given in the Regulations is not precise.

Develop and promote the use of favourable and flexible tender procedures suitable for PPPs

The EU procurement procedures (including “competitive dialogue”) should be reviewed, clarified and made flexible enough to address the specificity and nuances of PPP projects. Equally, national governments should endeavour to achieve consistency with EU directives when designing their national procurement procedures. The purpose and organisation of the tender should be clearly communicated to the private sector to dispel fears about the fairness and openness of the process.
We would not be in favour of additional regulation in this area at an EU level. Market experience shows that projects can be procured at a national, regional or even local level in an effective way which ensures competition and satisfies other EU general requirements.

**Assure flexibility of funds**

The EC needs to clarify the alternative applications of grants for purposes other than those services, supplies and works for the realisation of physical infrastructure (as discussed in Section 2.1 of part 4 of the EC’s Guidelines for Successful Public-Private Partnerships). The EC should review and clarify the availability of alternative forms of grants, especially grants which allow for provision of regular subsequent payments from the public sector during the project life (e.g. availability payments or shadow tolls), in the context of the seven year time limit for disbursement of the funds imposed by the EU budgeting period. This approach should ensure that hybrid PPPs have the full benefit of the “whole life costing” principle. This would allow the grant to be paid to the private sector for the delivery of the entire obligation.

The EU should consider the impact the complexities of PPP finance may have on whether or not a project/programme can meet the specific timing criteria, as for example the N+2 rules. Formal provision for exemptions on a case by case basis should be introduced.

**Develop favourable national frameworks**

The development of a stable legal PPP framework is essential in order to provide long term security to the private sector and to improve the speed of the PPP award and initiation process.

National governments wishing to encourage the take-up of hybrid PPPs should take whatever measures are necessary in developing and modifying their national legal, administrative and regulatory frameworks to facilitate the hybrid PPP process. In order to encourage private sector involvement in some cases it may be necessary to underwrite EU funds or provide other guarantees.

**Conclusion**

In conclusion, any of the recommended actions would improve the leverage of EU funds and PPPs, however to make a real step change, coordinated interventions at all three levels: acceptability, capacity building and institutional measures are required.

**Further steps**

Our intention is that this Report, based on a variety of information sources and views, should provide a base for further discussion and consultation.

Wide consultation, in our opinion, is of great importance. We look forward to presenting our conclusions and recommendations to policy makers from the EU 15 and NMS, Accession Countries, representatives from the EC, the World Bank, EIB and EBRD and other institutions, and to seek their views and opinions.

We are grateful to the World Bank for sponsoring this platform for discussion. Our findings and recommendations highlight the greater scope for the adoption of hybrid PPPs.
III General Analysis

Existing hybrid PPPs

110 There have been relatively few PPPs completed in the Cohesion Countries, so on the face of it, it is hardly surprising there even fewer examples of hybrid PPPs. However, given the large budgetary resources committed by the EU to these countries in the form of Structural and Cohesion Funds, one might also reasonably have expected that most PPPs would have involved EU funding and so most would have been hybrid. From that perspective the lack of hybrid PPPs is suggestive of the existence of barriers.

111 Recently the EC made some efforts and preparations to promote PPPs on a wider scale, including the publication of guidelines on public concessions, and continues to do so, as work proceeds on a set of guidelines for hybrid PPPs. The Green Paper on PPPs published on 30 April 2004 presented the opinion of the European Economic and Social Committee on its approach to PPPs. The EC also strongly suggests using private funds/PPPs in new regulations on EU funds.

To date few hybrid PPP projects have been implemented

112 There are two main routes to implementing hybrids in practice. These involve “ring fencing” and “underwriting of risks”. We present below some examples which illustrate these schemes.

“Ring-fencing” of projects (otherwise known as “divisible” projects)

113 The Government of Ireland constructed a length of the NI/MI motorway through conventional public funding that used an EU grant. They then granted a concession for the road.

114 In such structures, both the EU funds and the private sector co-exist and provide mutual support. However in procurement and implementation, they are accounted for as separate projects.

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<th>Investment project</th>
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<td>Road from A through B to C</td>
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<tr>
<td>Road from A to B</td>
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<td>Road from B to C</td>
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<tr>
<th>Funding at construction</th>
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<tr>
<td>EU funds / Public Funds</td>
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<tr>
<td>PPP</td>
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<th>Operation</th>
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<td>Concession for Private Sector</td>
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<tr>
<th>Gain from the funding structure</th>
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<tbody>
<tr>
<td>Lower total cost due to EU grant</td>
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<tr>
<td>Use of whole life costing principle</td>
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</table>
This method of dividing projects into separate EU funded publicly procured assets and services procured under PPP schemes provides a pragmatic solution to some of the obstacles. It does not, however, utilise PPPs’ whole life costing principle, where the capital costs are blended with operational costs and spread over the duration of contract. Experience shows that the whole life costing approach provides value for money in PPP projects.

“Ring-fencing of projects” Environmental example

Similar financing structures are possible in other sectors, including municipal water utilities. An example of such a structure is illustrated below.

### Underwriting of risks

Major toll road concessions that have incorporated EU grants have not experienced any significant problems. It is notable that in these cases, vis-à-vis the concessionaire, the grant was made available as a national government grant. The national government effectively underwrote the amount and availability of the grant, thereby facilitating the financing of the projects. It is also worth noting in passing that in one tender the amount of grant was determined by competition (one of the key selection criteria for the preferred bidder for the concession).

### EU legal framework

#### Current situation

The EU and national governments lack specific laws which apply to hybrid PPPs. However there are two significant issues to be analysed, regarding the possibilities of combining PPPs with a PPP scheme and which are regulated by EU legislation:

1. the source of national co-financing for the purpose of EU funds
2. the type of beneficiary / implementing body eligible for co-financing

### The source of national co-financing for the purpose of EU funds

**Structural Funds:**

Council Regulation No 1260/1999 in art 29 (2) Differentiation of the rates of contribution – states: “The contribution from the Funds shall be calculated in relation to either the total eligible cost, or the total public or similar eligible cost (national, regional or local, and Community) under each assistance”.

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**Water treatment solutions**

- **Investment project**
  - Water treatment plant
  - Water distribution network

- **Funding at construction**
  - EU funds / Public Funds
  - PPP

- **Operation**
  - Concession for Private Sector

Gain from the funding structure

- Lower total cost due to EU grant
- Use of whole life costing principle
The regulation therefore allows two different ways of calculating contributions from the Funds:

- in relation to the total eligible cost, including both publicly and privately funded costs, or
- in relation to the total public or similar eligible cost.

Currently each Member State is choosing its preferred way of presenting and calculating the contribution from the Funds. Many countries prefer the second method, which is considered simpler. Consequently, the financial tables are as follows:

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<tr>
<th>Priority / Activity</th>
<th>Public Total cost</th>
<th>Community contribution</th>
<th>National Contribution</th>
<th>Private</th>
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<tr>
<td></td>
<td>Total</td>
<td>ERDF</td>
<td>ESF</td>
<td>Central budget</td>
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Such a structure prohibits use of private funds in the national contribution to the Structural Funds. In such cases, even if a private body is ready to invest in the project, its funding would not be calculated as a national contribution and could not be co-financed with EU funds. As such there is little incentive for the public sector to seek assistance from private sector financing and thus to create a hybrid PPP.

*Cohesion Fund:*

- Council Regulation No 1164/94 of May 16 1994 establishing a Cohesion Fund art. 7 Rate of Assistance states: “The rate of Community assistance granted by the Fund shall be 80% to 85% of public or equivalent expenditure, including expenditure by bodies whose activities are undertaken within an administrative or legal framework by virtue of which they may be deemed to be equivalent to public bodies.”

- The “Guide to Cohesion Fund 2000 – 2006” states: “A concession covering the construction and the operation of infrastructure eligible for assistance from the Cohesion Fund in general constitutes a legal and administrative framework, which enables expenditure incurred by the concession-holder to be regarded as public expenditure”.

- Additionally, “a system of control and certification by the public authorities of expenditure carried out by the concession holder will also be required”. The Cohesion Fund regulations permit hybrid PPPs (without specifically considering them) in the area of source of national co-financing.

*ISPA:*

- Council Regulation No 1267/1999 of 21 June 1999 establishing an Instrument for Structural Policies for Pre-accession (ISPA) in Art 6 states: “The rate of Community assistance granted under ISPA may be up to 75% of public or equivalent expenditure, including expenditure by bodies whose activities are undertaken within an administrative or legal framework by virtue of which they are regarded as equivalent to public bodies. The EC may decide, in accordance with the procedure laid down in Article 14, to increase this rate to up to 85%, in particular where it considers that a rate higher than 75% is required for realising projects essential for achieving the general objectives of ISPA.”

- The preamble of this regulation explains that the rates of assistance provided from the Community under ISPA should be set in order to strengthen the leverage effect of resources, promote co-financing and the use of private sources of finance and to take account of the capacity of measures to generate substantial net revenue. As such, the ISPA regulations do not constitute barriers for hybrid PPPs in the area of source of national co-financing (it can be either public or private).

*TEN-T:*

- Council Regulation (EC) No 2236/95 of 18 September 1995 laying down general rules for the granting of Community financial aid in the field of trans-European networks states: "Regardless of the form of intervention chosen, the total amount of Community aid under this Regulation shall not exceed 10% of the total investment cost.”

- Community aid can be used for co-financing studies, subsidising the interest on loans, guaranteeing loans, or direct grants to investments.
The type of beneficiary / implementing body eligible for co-financing

Structural Funds:

130 EU regulations do not specify who should be the beneficiary for co-financing. Regulation 1260/1999 only says “final beneficiary: means the bodies and public or private firms responsible for commissioning operations”.

Cohesion Fund:

131 In the case of the Cohesion Fund the body responsible for implementation can be both a public and/or a private entity. This entity is defined in the application for Cohesion Funds and confirmed in the Commission Decision. According to article 5 of the Commission Regulation (EC) No 16/2003 this body may delegate the execution of the project to a different body, which is also entitled to bear the eligible costs.

ISPA:

132 In the case of the ISPA Regulation the Accession Country is defined as the beneficiary of co-financing. In practice, the beneficiary is an individual unit (e.g. a city).

TEN-T:

133 Projects are eligible for TEN-T funding if they are financed by public entities or their equivalents, but the definition of public entity equivalents according to Regulation No 2236/95 encompasses “in particular public or private enterprises which run public services or services in the public interest”.

Significance of EU legal framework for PPPs in the New Member States

134 In accordance with the grant system valid for the EU15, those regions of the EU that had a GDP per capita below 75% of the EU average qualified for “Structural Funds funding for Objective 1 Regions” (to which the bulk of the funds is dedicated). Countries with a GDP per capita below 90% of the EU15 average (Ireland, Portugal, Spain, and Greece) qualified for the Cohesion Fund. Once funds had been allocated to these regions and countries, the European Commission and the respective national government were responsible for planning and justifying their spending over the relevant 7-year funding period (1993-1999, 2000-2006). It is worth noting that in the next funding period Ireland will no longer qualify for Cohesion status, as the Irish GDP is now above the EU average, partly due to EU financial support.

6 Commission Regulation (EC) No 16/2003 of 6 January 2003 laying down special detailed rules for implementing Council Regulation (EC) No 1164/94 as regards eligibility of expenditure in the context of measures part-financed by the Cohesion Fund, art 5 (1): The expenditure to be taken into account for the payment of Community assistance must have actually been incurred during the period of eligibility as defined in the Commission decision, in accordance with Article 8(2)(b) of Commission Regulation (EC) No 1386/2002(3), and must be directly related to the project. The expenditure must relate to payments certified by the Member State and actually made by it or on its behalf or, in the case of concessions, by the concession-holder to which the body responsible for implementation has delegated implementation of the project, and supported by receipted invoices or accounting documents of equivalent probative value.
From the perspective of NMS, it is worth noting that all of them are eligible for both Objective 1 and Cohesion Fund grants. Most NMS regions have a GDP per capita less than 50% of the EU25 average.

In principle, the use of Structural and Cohesion Funds requires both a matching contribution from the national government and a demonstration of “additionality”.

Accordingly, as long as the development plan contained in the “Single Programming Document” / “Community Support Framework” is comprehensive enough, and the national government is able to budget for the additional expenditure, then it should be possible for the country or region in question to absorb most of the Cohesion and/or Structural funds allocated to it. For NMS the lack of experience with the application procedure and bureaucratic delays may be a problem; in this regard experience with pre-accession aid programmes like ISPA is invaluable.

It is important to point out that only parts of Structural Funds allocations are suitable to combine with PPPs. In the Objective 2 regions7, the bulk of a structural fund programme is allocated to highly dispersed projects in pursuit of the softer growth factors (e.g. the rates of female participation in the workforce). In Objective 1 regions, where there is a greater focus on hard infrastructure rather than on “soft” programmes, there could be greater opportunities for hybrid financing.

The Cohesion Fund is more closely aligned in the direction of PPP-suited projects, where it targets specifically environmental (principally water and wastewater) and transport (principally Trans-European Networks) sectors.

The ISPA and TEN funds share the Cohesion Fund’s characteristics in the extent that they are closely aligned in the direction of PPP-suited projects. ISPA targets the transport and environment sectors, while the TEN fund focuses on developing transport and energy networks.

In awarding all EU grants, the EC pays attention to its four main principles: fair competition, prohibitions on state aid, protection of public interest and awarding the optimum level of financing. In the case of PPPs, attention is paid to the fairness and transparency of the procurement process, not giving an unfair competitive advantage to the private partner and making sure that the project results do not suffer from the use of the PPP structure.

Proposed changes to the current EU legal framework

The proposed changes to the grant rules in the next programming period (2007-2013) will be more beneficial for NMS. Approximately a third of the Community budget is to be devoted to cohesion policy, which will concentrate on the least favoured regions (that is, largely NMS). The reformed system is to be more decentralised and efficient, with quicker project approval and a less complicated

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7 Objective 2 regions - those facing structural difficulties and whose population or area is sufficiently substantial. They shall include in particular areas undergoing socio-economic change in the industrial and service sectors, declining rural areas, urban areas in difficulty and depressed areas dependent on fisheries.
application and implementation process. This will remove or lessen some of the institutional obstacles to developing hybrid PPPs, encouraging national authorities to apply for EU funds for these projects.

143 Another factor which may substantially increase use of hybrid PPPs is a proposed provision concerning the subsidising of revenue-generating projects. Usually the contribution of the Funds is lower in such cases, but the draft regulation contains an exception depending on the rate of mobilization of private financing, in particular in the form of a PPP. This is intended so as not to make EU funding a cheaper alternative to proposed private funds, and the provisions are vague at the moment, but it may prove a boost for the popularity of PPPs both in NMS and in the EU as a whole.

144 The third substantial change is the extension of the period during which the project cannot be undergo significant modifications, from 5 to 7 years from the date of the financing decision. This requires flexible contract and grant application structuring to encompass potential modifications.

145 Further information and extended analysis of the changes proposed in EU grant regulations is available at Appendix VI of this Report.

The legal and institutional framework in Member States

PPP laws and dedicated PPP units

146 The legal and institutional frameworks of individual Member States have two factors that impact the PPPs developed in those countries. The first of these is the presence of a dedicated PPP law or special regulations in this field (for example regarding risk transfer). While some Member States have a comprehensive legal PPP framework, in some Member States there are no such laws at all, and in yet others regulations are new and untested.

147 The second factor is the existence of a specialised PPP focussed unit that promotes and aids PPPs. Partnership UK in the United Kingdom is an example of such a unit, which actively promote the PPP concept in the UK and abroad. Another example is PPP Centrum in Czech Republic, which is the institution created under the umbrella of the Ministry of Finance.

Special issues related to NMS

Issues and barriers created by national governments of NMS

148 While the issues mentioned above that affect the EU apply to NMS as well, there are additional problems created by national rules relating to spending EU funds. We looked in more detail at Poland, as Poland is the largest recipient of EU funds (both cohesion and structural) among the new EU Member States. We have also confirmed that similar restrictions exist in the Czech Republic, Estonia and Hungary.

149 We have identified the following issues that have been created by the national governments:

Structural Funds:

- **National Contribution = Public Contribution:** The national contribution towards a programme may be calculated, either in relation to the total eligible cost (regardless of the source of funding), or in relation to the total public cost. Poland and many other EU countries have chosen the latter on the grounds of simplicity. On the face of it, this does not allow for private sector contribution to be part of the national contribution to structural funds, therefore preventing the prospects of combining EU structural funds with PPPs.

- **Closed list of beneficiaries:** There are closed lists of eligible beneficiaries for operational programmes that are to co-finance infrastructure projects. In general for some types of investments (e.g. roads, ports), the lists are restricted to public sector entities. In some cases it

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8 Significant modification is a modification of a project affecting its nature or its implementation conditions or giving to a firm or a public body an undue advantage; or resulting either from a change in the nature of ownership of an item of infrastructure or the cessation of a productive activity.

9 Integrated Regional Development Operational Program and Operational Program Transport
should be possible for the private sector to be involved in such projects as a minority shareholder in a public company which would be the beneficiary of the funds. This approach may be difficult however, in those cases where the beneficiary list is limited to named organisation. The good news here is that the lists form part of the Programme Complements, and can therefore be readily amended by the national government.

*Cohesion Fund:

- **Closed list of beneficiaries:** EU Cohesion Fund rules allow for the national contribution to be provided by private sources. They also allow for delegation of project implementation to the private sector with the permission of the European Commission. However, for years 2004-2006, the national implementation strategy restricts participation to the public sector entities – again limiting the private sector participation to minority shareholding in public companies.

**The Maastricht criteria and their impact on hybrid PPPs in New Member States**

150 Countries wishing to join the EMU are imposed, by the Maastricht criteria, a set of deficit indicators that must be complied with (convergence). NMS have expressed interest in joining the EMU and as a consequence are taking the measures required to converge. This limits the ability of NMS to raise the finance needed for the public contribution to both non-hybrid PPP projects and traditional public procurement supplemented by EU funds and gives them an incentive to pursue hybrid PPPs.

151 Among the NMS, convergence seems to be proceeding smoothly, with most countries already well within the national debt to GDP limits (with the exception of Cyprus and Malta) and credit ratings on the other hand are not likely to be a barrier towards obtaining financing, as they are generally good (A- to AA-), with the exception of Poland (BBB+).

152 The budget deficits look less optimistic, with an average of 2.8% of GDP, just under the Maastricht 3% limit, and Cyprus, Malta, Hungary and Poland exceed this limit. Experience shows that the budget deficit is a tighter restriction for hybrid PPPs. The lack of manoeuvring room within the budget deficit limits means that large funds are not available for the public financing of projects in order to supplement the EU co-financing according to the “additionality” principle.
IV Case Study Analysis

Athens Ring Road

| Description | The project involved the construction and operation of a 65 km long highway with a central strip for the suburban railroad (the operation of the suburban railroad was not part of the PPP project but had to be considered in the planning as it was constructed simultaneously).

The need for a northern ring road from the west of Athens to the northeast was identified as far back as the 1960s. When plans for the airport emerged, the route was extended to the new Athens International Airport.

The project helped reduce traffic and pollution in central Athens and was also the backbone of the transport network during the 2004 Olympic Games. |

| Rationale | The project was developed as a PPP in order to:

• Minimise public funding. Public funding (including EU Structural funds) covered 34% with the private sector providing the remaining 66% project funding.

• Allocate risks to the private sector. The project structure allowed the Greek Government to allocate most risks to the sponsors.

EU funding was requested to close the financial gap, turning the project into a hybrid. The project was not viable for the private sector if the private sector had to provide 100% of funding. EU Structural funds allowed the private sector to reduce its financial commitment by 34% while maintaining the same level of revenues. As a consequence, the bankability increased. |

| Total value | The original construction cost associated with the concession contract amounted to €1,249 M. The concession contract also covered parallel public works not included in the concession contract and not budgeted for when the concession contract was signed. The final figure paid by the Greek State for these parallel public works was €220 M.

Additionally, the concession contract covered the possibility of additional works to be awarded to the concessionaire without public tendering. These works were required due to changes in the design as a result of court ruling enforcing environmental regulations and simultaneous construction of the suburban railroad. This increased the project cost by €571 M.

As a result, the final project cost was €2,040 M. |

| Financing | The concession contract cost was financed by government grants (through EU Structural Funds), which covered nearly 34%, and contractors’ equity funding 14% of concession contract cost. The debt finance was structured into separate facilities issued by the European Investment Bank (EIB) covering 45% of project cost and local commercial banks funding the remaining 7%.

The parallel and additional works required by the project (€791 M) were 7% financed by the EU Structural Funds (€55 M) and 93% by the Greek Government (€736 M). |

| EU Funding | Structural Funds: €476 M (€55 M for the parallel and additional works) |
PPP Scheme | Hybrid DBFO
---|---
PPP Actors – Winning consortium | A consortium originally composed of 14 Greek companies, Attiki Odos S.A., won the DBFO bid.
Construction period | Originally 6 years, extended to 7 years after final design alterations.
Operation period | Whatever comes first, either the Maximum Concession Duration – September 2024 – or the date at which the Return on Equity of the concessionaire attains an agreed present value.

Rationale for choosing the project as a case study
1. The project is a hybrid PPP, with strong financial backing from EC Structural Funds and EIB.
2. One of the largest and most needed transport projects ever undertaken in Greece.
3. A big lesson of procurement for the Greek government. The experience gained by the public bodies was used during several subsequent PPP projects.

Project history

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153 The first studies on the project began in the 1960s, when the need for a new ring road was identified. The final studies took place between 1994 and 1999 and were partially funded by the EU.

154 The Ministry of Environment, Physical Planning and Public Works was responsible for all the analysis, preparation, tendering and awarding of the project, allocating all responsibilities to a single unit, the “Special Service for Public Works: Projects Rion – Antirion Bridge – Athens Ring Road”. The financial advisor to the government was the National Bank of Greece S.A.; the legal advisors were Linklaters & Paines and ”Zemberis-Markezinis-Labrou Law office”. Jacobs Gibb Ltd and SGI – TRADEMCO were appointed as Independent Engineer in order to oversee the works and approve engineering plans.

155 The Greek Ministry of Environment, Physical Planning and Public Works signed the concession contract with Attiki Odos, S.A. in May 1996 with parliamentary ratification was obtained in December 1996.
The negotiations to sign the concession contract took almost 2 years. The lack of experience on both the public and private sectors contributed to the length of the negotiations. As this was one of the first PPPs realised in Greece, negotiations were prolonged as it was difficult to define the main issues of the concession contract.

Once the concession contract was signed, the Greek Government requested the co-financing of the project by Structural Funds. The Athens Ring Road was included in the list of objectives of the Operational Programme "Road Axes, Ports and Urban Development" for the period 2000-2006. Co-financing from the European Regional Development Fund (ERDF) was approved in 2001.

The close of external financing (private funding not coming from sponsors) took longer than expected. The reasons were mainly an ensuing legal challenge relating to a Section of the route and a dispute over procurement of toll collection equipment that delayed the signing of the agreement until March 2000. These uncertainties introduced a high risk to the transaction (cost overruns, provision of additional funding by the public sector, etc) and the banks waited until all pending issues had been resolved and all uncertainties eliminated.

The hybrid structuring of the project was essential to the project’s success. The public sector, the Greek Government, wanted to allocate most of the project risks to the private sector. It was clear from the beginning, however, that due to several factors (e.g. this was only the second PPP in the road sector in Greece, construction difficulties were envisaged and the need of dealing with 33 local authorities), the project required strong state help. This financial help was necessary because sponsors considered that the road traffic levels and the tolls the users were prepared to pay were not enough to provide an adequate return on the investment they were required to provide.

However, the Greek Government lacked the financial resources due to the high General Government Budget deficit (in 1995 the General Government Budget stood at 10.2% of GDP, but in 1991 it had been 16.2% and 14% in 1993). Additionally, the Greek Government had a budget target for EMU convergence of 3% of GDP, limiting spending capacity.

As a result, a PPP structure (allowing the Greek Government to pass on risks to the private sector) was set up with EU co-financing (providing the funds the Greek Government needed to raise the interest of the private sector for developing the project) and EIB additional funding (providing almost 70% of the private funding of the project and hence 45% of the overall concession contract cost). This solution allowed the public sector to allocate the majority of construction risks to the private sector, the private sector to obtain an adequate return on its investment (as non-refundable public contribution was received) and the Greek Government to get financial support (from the EC Structural Funds covering part of the public contribution). The project was co-financed from Structural Funds as it was a regional development project.

The project was structured as a real toll road DBFO with strong government financial backing during construction. It followed the structure shown below:
The contract originally signed included a construction period of 6 years. Design alterations because of a court ruling (forcing a change of the route and additional works to reduce the environmental impact) and the construction of a suburban railroad, delayed construction by 19 months. The operation period lasts until September 2024, or the date at which the Return on Equity of the concessionaire attains an agreed present value, whatever comes first.

Land expropriation risk was allocated to the Greek Government. Considering the difficulties of expropriating land in a city, such as Athens (as opposed to expropriating in the countryside) the concessionaire allocated full risk to the public sector as it had an obvious advantage in controlling this risk (legal power to expropriate).

Design and construction risk were allocated to the concessionaire, which passed it on to the Construction Joint Venture (a consortium including all 14 Attiki Odos’ shareholders at that time) through a lumpsum contract. The concession contract included provisions limiting this construction risk. For example, in the case of a construction cost increase for changes to the original design (which took place) Attiki Odos had the right to request this additional cost from the Greek Government.

Most of the operation risk was allocated to Attiki Odos, which signed an operation contract with a separate company owned initially 50% by the sponsors and 50% by Egis, a French tollroad concessionaire (some sources have indicated that the original structure was 51% sponsors, 49% Egis), that included most of the operation risk.

Overall, the Greek government was able to transfer construction, operation, and traffic risks (subject to a standard non-compete clause) to the SPV under the concession contract. The lenders to the SPV were therefore fully exposed to these risks, mitigated as they might be through the construction and operation subcontracts. However, EIB’s policy is that they do not accept construction risk, and they will usually accept remaining project risks only after a period of satisfactory operation and the demonstration of acceptable cover ratios. Accordingly, as is usually the case, the EIB was guaranteed...
by the other lenders and, in this case, by the sponsors, providing 50% cover each. Once construction was complete, the EIB allowed these guarantees to be replaced by a guarantee from the Greek government.

168 In this way, the Greek government did effectively transfer construction risk to the SPV, but has taken operation and traffic risk back through the guarantee, albeit at a reduced level compared with the risk at the outset.

**EU regulations**

**EU involvement**

169 An essential point to consider is that the project had been prepared and awarded prior to the request for EU funding, although the process followed most of the EU approved awarding procedures. Nevertheless, according to some of the interviewees, there was a later protest by non-winning consortia about the fact that certain EU procurement rules had not been met (the protest was related to the addition of a 11.4 km stretch of road not previously included in the tendering documentation).

170 This late request for EU funding meant that the EU had little involvement in the process (consortium formation, awarding, preliminary analysis, concession contract negotiations).

171 The timing of EU involvement is imposed by the application procedure, as information on the concession contract is required to be included in the application.

**Requested assistance and cost overruns**

172 One obstacle identified during our interviews is that once the figure of requested assistance is agreed, it is difficult to subsequently increase it. As a result, if national governments are not fully covered against the cost overrun risk in the concession contract, it may be up to the national governments involved to provide the additional funds requested by the concessionaire.

173 In the Athens Ring Road example, the assistance requested related to the total cost of €1,713 M. The final cost, including additional and parallel works, was €2,040 M. This meant that the Greek Government had to meet the additional funding request by the private sector of €345 M without further assistance from the EC.

**Application procedure**

174 Another constraint identified during the interview process concerns the information needed for the application. When a project is a significant revenue generating project, the revenues are deducted when calculating the eligible cost for co-financing. As a result, it is not possible to request the co-financing until the concession contract has been signed, as it is only then that estimated levels of user charges (revenues) are known.

175 The effect on the project was that the Greek Government had to sign a concession contract making a commitment to provide €421 M, but there was no assurance that the EU would provide the funds. The uncertainty as to whether the EU Funds would be granted, combined with the Greek Government’s BBB- credit rating (granted by the IBCA rating agency) introduced a heightened risk as to the availability of public funds.

176 In conclusion, the overall view is that the EU Structural Fund rules did not impose extraordinary obligations. Quite the opposite, their availability was extremely helpful in many ways to structure the PPP, specially offering security to private investors of the future availability of public contribution and at the time decreasing the Greek Government’s financial commitments when the government was running a high deficit and needed to reduce it to fulfil the EU convergence criteria.

**Main Difficulties**

**The financial close took longer than expected**

177 The financial close was delayed mainly because of uncertainties surrounding the project. These uncertainties increased the risks for the banks, delaying the signing of the financial agreement and forcing the public sector to provide funds to the sponsors to begin construction.
Environmental issues

178 A stretch of the road had to be altered to accommodate a judicial decision on environmental impact of the project. Additionally to the cost overrun, there were subsequent delays as construction came to a halt in the disputed route area. The construction and concession period were eventually expanded by 19 months.

Legal framework

179 There was an absence of legislation specifically authorizing PPP contracts and the contract needed to be specifically ratified by parliament.

Local contractors and governmental officials’ previous PPP knowledge

180 The 14 construction companies involved lacked the experience to manage complicated, mega-projects as the companies involved were on average small contractors. Additionally, at the outset, these contractors were ill-equipped to take on major design-build commitments.

181 However, it is worth pointing out that this and other similar projects provided a great deal of experience to all the parties involved, being the base to plan successful PPP projects subsequently.

Lack of international bidders

182 The challenge of working in an unfamiliar urban setting dissuaded large international construction companies from being interested in the project. Only one foreign company submitted a bid. Local knowledge was perceived (and proved to be) essential in the light of having to deal with local communities, bureaucracies and utilities.

Main Lessons Learned

Value for Money

Value added by the Hybrid structure

183 The EU co-financing created value for the national government as it reduced the financial commitments that would have otherwise been made to the sponsors. This reduced the discounted cost of the project for the national budget.

184 Sovereign risk at this time in Greece was high. The availability of funding from the EU co-financing the project mitigated the risk of the Greek Government not having funds in the future to fulfil the public contribution (allocated to the private sector). In light of this, the sponsors could offer a better deal to the Greek Government.

Financial analysis of the project

185 Some interviewees consider that the project was not fully bankable (because the risks that the financing sector had to accept were perceived as too high), which forced the financiers to a lengthy negotiation and the Greek Government to provide additional guarantees to the financiers. The long negotiation process compelled the Greek Government to provide supplementary funds to sponsors until financial close was achieved so that construction could begin.

186 The lesson to be learnt is that proper financial planning and VfM could have solved this issue, by foreseeing the low appetite of financial institutions for the project with the proposed structure and allowing the introduction of changes to rectify this. This saves time during the negotiation of the concession contract with sponsors and allows a quicker financial close.

Institutional framework

Project preparation

187 When designing the road route, a correct environmental impact assessment, in line with EU environmental rules was not carried out, based on our interviews. As a result, there were judicial rulings forcing the change of some road sections to fully comply with EU regulations. This led to delays, cost overruns and a higher than originally anticipated public contribution from the Greek Government.
As the parties involved in this project learned, when a project has been in the pipeline for many years and finally the tender process begins, it is necessary to undertake an update of both technical and financial analysis, as they might be outdated. These analysis need to carefully consider environmental impacts and other external effects of the infrastructure to be built.

PPP support bodies

In opposition to the common best practice in Europe’s highest developed PPP markets such as the UK, no PPP governmental think-tank / unit was involved or supported the Ministry of Environment, Physical Planning and Public Works. Many countries have set up a PPP think-tank with the objective of assisting awarding authorities with some sort of guidelines on PPP procuring and tendering (VfM templates, tendering rules, negotiation process, etc) and with advice as needed.

In this case, the project was affected by the lack of PPP structuring experience of the governmental bodies and a PPP think-tank could have provided help for the PPP capacity building of the awarding officials and policy makers, which is a valuable lesson for countries beginning to develop PPPs.

Awarding authority experience

As it has been mentioned before, negotiations for the concession contract were protracted on because the parties involved, both from the private and public sector, lacked previous PPP knowledge. This turned out to be a handicap as they were not experienced in structuring complex issues and a long time was needed to reach agreements.

While the hiring of external advisors helps to structure PPPs, it is recommended that the public sector officials and policy makers, as the ultimate decision makers, go through a capacity building process in advance to PPP tendering, so that they fully understand the important issues and are capable of making the right decisions in due time (and build up knowledge making themselves as independent as possible from advisors).

Legal PPP framework

The lack of a legal and stable framework (the project was launched without a PPP law having been previously issued) introduced uncertainty for the private sector.

As it is always the case when uncertainty is involved, the private sector requests either a higher return or additional guarantees from the public sector. In the Athens Ring Road, for example, an underlying guarantee from the Greek Government to the EIB covering the EIB financial risk during all the operation period was provided. It is not common in road PPPs for the public sector to provide such guarantees.

The main lesson for policy makers to be derived is that to avoid providing legal guarantees or allowing a higher return to the private sector and, eventually, to obtain a better deal, a stable institutional framework needs to be developed prior to launch PPPs.

Fiscal impact and fiscal governance mechanisms

Fiscal impact

Most of the budget commitments were short term, as the project was structured based on user charges.

This is clearly one of the most important lessons for policy makers. Hybrid PPPs offer the opportunity to decrease the fiscal impact of public help requested by the private sector. When projects require state help to be feasible, EU co-financing is the best route to structure the PPP, through hybrid PPPs. If correctly structured, as in this case, with appropriate use of co-financing, the national budget impact may be kept to a minimum whilst keeping the project interesting and profitable for the private sector.

From the risk perspective, the construction risk was mostly allocated to the sponsors, with some risks remaining on the public sector. However, there are still some long term potential budgetary obligations for the Greek Government during operation. Although not strictly an expense for budget purposes, the Greek State provides an underlying state guarantee to the EIB during the whole operation period, bearing a risk equivalent to the outstanding EIB debt.
Another lesson is that officials involved in a PPP structuring should consider the long term implications of the public commitments (and if possible quantify them). This means that not only the short term commitments deriving from the state help must be considered, but also underlying guarantees with implications for on-balance sheet (ESA-95 ruling) increasing the National Deficit.

Relations with public authorities involved

One of the issues raised by the private sector was the difficulty of dealing with 33 authorities, as the roads affected many municipal authorities (with conflicting priorities and opinions). The problems faced were the need to prepare various documents and obtain approvals from each of the 33 (permits for works, other authorisations, the request of information and plans for designing tasks, etc.). A suggestion for similar projects would be that steps are taken and provisions are made by awarding authorities to unify the construction permits request procedures and speed up the approval process.

Monitoring

Several provisions were made during the construction phase including the appointment of Jacobs Gibb Ltd. and SGI-TRADEMCO to oversee the works and approve engineering plans. Gibb was the Independent Engineer whose appointment and role were clearly described in the concession contract. Their role was to approve the designs proposed and make adjustments as required.

Considering the EU involvement, the regulations for disbursement and monitoring progress of works were not considered difficult to meet because the Greek regulations were even stricter than the ones required by the EU. These requirements involved random visits and full analysis of costs incurred.

This case shows that officials should consider the appointment of independent engineering companies to additionally monitor the works of large PPPs. The advantage these advisors provide is their project management experience, allowing a better control of contractors’ activities when the authorities are not highly experienced in this type of projects.

Specific Issues about Replicability of the Model

Our assessment indicates that the project is highly replicable in NMS as the conditions are similar to Greece 10 years ago:

1. The project together with the Athens airport were some of the first PPPs to be launched in Greece, as will be the case with PPPs in most NMS.

2. The legal framework for PPPs was not developed in Greece when the project was tendered. In the NMS, governments are developing PPP laws and/or the legal framework for PPPs is new.

3. Public resources were limited and EU support was vital for the development of infrastructure. NMS suffer from limited spending capacity and strong infrastructure development needs. This financing gap (between the cost of infrastructure needed and that which was affordable) may be closed by the blending of private funding and EU funding together, allowing better leveraging of available public monies.

4. The active involvement of the EIB, which provided most of the private financing of the deal, was another success factor. Most NMS lack local banks with project finance experience and international banks may not be interested in funding certain projects (for lack of size, risk appetite, long debt maturity requested by sponsors, etc) so the EIB/EBRD with their vast project financing experience may provide the external financing the sponsors need for the project.

5. Projects need an appropriate blend of both local and international expertise. Local knowledge is essential when dealing with multiple public sector entities. International knowledge is essential where local companies in NMS are still building their own experience and understanding of PPPs.
Summary

205 A hybrid structure was essential to the success of the project, co-financing the public contribution and providing Value for Money to the national government.

206 EU involvement was sought when the project was already awarded, so the EU had little influence on the planning and tendering.

207 The public contribution was higher than envisaged but the EU contribution was not increased.

208 The Greek Government provided guarantees to the private financers.
## Perpignan - Figueras Rail Link

| **Description** | The project involved the construction and operation of a 45 km high-speed rail link between Perpignan in France and Figueras in Spain connecting Spanish and France high-speed rail networks, including an 8.3 km tunnel under the Pyrenees. The link is designed for both passengers and freight traffic and will reduce journey times between Spain and France. Additionally, it addresses interoperability issues (i.e. the necessity to change trains to accommodate the different track gauges between France and Spain). |
| **Rationale** | The project was developed as a PPP because:  
- It was a bilateral project launched under Spanish and French laws. Spanish and French PPP frameworks were very similar while the traditional procurement frameworks were slightly different. Thus, the PPP structure made it easier to procure the project in a coordinated way.  
- It allocated most of the risks to the private sector.  
This project was awarded priority status by the European Parliament in 1996, as it was considered crucial to develop the Trans-European Transport Network (TEN-T).  
- This priority status was essential during the planning phase, as the EC was greatly involved in co-financing close to 100% of the studies required to launch the tender and provided political support to the initiative.  
- EC contribution was secured from the moment the project was granted priority status (in 1996, 5 years before the first tender) hence from its inception this project could be planned as a PPP hybrid.  
The EC funding was important to limit the financial commitments of the Spanish and French Governments, by providing 5% of the project cost or 10% of public contribution. Greater funding could not be obtained because of TEN-T project co-financing rules. |
| **Total value** | Total cost of the project was €1,100 M. |
| **Financing** | ACS (ACS-Dragados) and Eiffage contributed 10% of the project cost as equity, while the French and Spanish governments arranged 45%. The EU added 5% of the project cost. The debt is lead arranged by several banks (ING, BBVA, Banesto, Caja Madrid, and Royal Bank of Scotland), which provided the remaining 40% funding of the project. |
| **EC Funding** | TEN-T Funds: €55 M. |
| **PPP Scheme** | Hybrid BOT |
| **PPP Actors – Winning consortium** | TP Ferro consortium which is a 50-50 joint venture between Spanish group ACS and French group Eiffage. |
| **Construction period** | 5 years |
| **Operation period** | 45 years |
Rationale for choosing the project as a case study

1. It is a hybrid PPP with EC co-financing for the development of the trans-European Transport Network (TEN-T) and was developed as a hybrid PPP since project inception.
2. It is a large cross-border project.
3. The project is from the rail sector, a sector needing much development in NMS.
4. The project initially failed but, on subsequent tendering, led to a successful contract award.

Project history

| Bilateral agreement signed | EU Parliament considers the project as of Community interest* | Project analysis | Tender released | Bids submitted | EuroFerro selected as preferred bidder | Tender cancelled |

| New tender released | TP Ferro selected as preferred bidder | Concession agreement signed | Construction commences | Financial closing | Construction completed. Operation commences | Concession Hand Over |

* Also the date TEN-T funds were effectively guaranteed (the amount was not known until 1998)

209 The improvement of connections between Spain and France through the Pyrenees was long desired by both governments, especially considering the peripheral situation of Spain within the EU.

210 On October 1995 the governments of France and Spain signed the Accord of Madrid, a bilateral agreement that created the legal framework for the construction and operation of a high-speed rail link between Perpignan in France and Figueras in Spain. The procurement method for the project was a PPP for the reasons mentioned above.

211 The Spanish and French Governments requested support from the EC and in July 1996 the European Union Parliament awarded the project a high priority status in the TEN-T programme. This meant that the project was to receive political support from the EU, that studies could be co-financed by the EU and that funding could be allocated to the project.

212 The project analysis and tender preparation took five years until 2000. The technical advisors to the Inter-Government Commission (CIG) were SNCF and Renfe, the legal advisors were Clifford Chance and the financial advisors were Ernst and Young. Finally in July 2001 the tender announcement was made. The deadline for submission of offers was April 2002, and in July 2002 the EuroFerro consortium (Bouygues/Dragados) was selected as the preferred bidder. Then a lengthy negotiation process began. These lengthy negotiations were due to the open nature of the tender, with many issues left to be clarified during negotiations. Finally, in April 2003, when an agreement was in principle reached, the concessionaire assessed that the project was not bankable and demanded additional guarantees from the Spanish and French Governments. As the submitted offers were valid for just one year, and this deadline was just 1 week away, the tender was cancelled.

213 A month later, in May 2003, a new tender was announced based on the concession contract negotiated during the previous year and agreement reached on main issues. This time TP Ferro, a consortium of Eiffage and ACS-Dragados, was selected as the preferred bidder. The concession agreement was signed on February 2004 and construction began in November of that year. Financial
closing, however, only came about on February 2005, just a week short of the one-year deadline specified in the concession agreement. The commercial credit facilities were successfully syndicated by the lead arrangers in June 2005.

214 The amount of EU funding achieved was 5% of total project costs (10% of public contribution). Recently, the French and Spanish governments have petitioned the EC to increase the public contribution to 20%, as co-financing rules for TEN-T projects have been changed.

Background information

215 Essential to the success of this hybrid PPP was the support of the EC, especially during the planning stage.

216 The EC support to this project was not as important from the financial perspective as in the other projects analysed in this Report (due to the relatively lower 5% of project cost). The institutional support at EC level was fundamental during the analysis phase. This project was selected as one of the 14 priority infrastructure projects to be developed under the TEN-T programme in 1996 (the TEN-T programme was extended to 20 projects in 2001).

217 This gave the project, firstly, political support from the EC, helping to overcome hurdles when the project was in its initial stage and agreements had to be made between the Spanish and French Governments. Secondly, the EC co-financed almost 100% of the required studies, which helped the project move forward as funding for planning was easier to obtain. Thirdly, it guaranteed part of the public contribution. The TEN-T programme allocates for every budget period an approximate funding figure for every project based on TEN-T budget and the estimated project cost. This meant, that, in contrast to the other projects in this Report, the availability of co-financing was confirmed before the project was launched, which greatly helped the financial planning of the Spanish and French Governments.

218 The project involved 2 countries and 4 ministries (transport and finance ministries in both Spain and France). With the objective of managing the involvement of all these parties, the CIG was established. The CIG assisted the two governments preparing all the decisions required for the concession contract. However, ultimate decision making lay with the Spanish and French Governments.

219 The CIG set up 3 working groups, one for technical analysis, another for legal analysis and the third for financial and economic analysis. These were staffed with officials from the transport ministries and finance ministries and external experts as required, as the authorities involved were experienced in handling most aspects of PPPs.

220 The planning aspect was external advice was sought for the full project was the technical design and it provides an interesting example. In the mid 1990’s, when technical analysis began, there were no specific rail infrastructure development bodies in either Spain or France (Gestor de Infraestructuras Ferroviarias (now ADIF) was created in Spain in 1996 and Rseau Ferré de France (RFF) in 1990). As a result, governments lacked the technical experience. Instead of hiring an international engineering company, they outsourced the design works to RENFE and RFF, SOE rail monopolies at the time.

221 The reasons were the following:

- the users of the infrastructure will be mostly RENFE and RFF. From that point of view, it made technical sense that the companies using the infrastructure had the capability of designing the network according to their needs;
- as RENFE and RFF are owned by the Spanish and French Governments, respectively, coordination was easier than with an external engineering firm (whose objectives in the project could have differed from the objectives of the Spanish and French Governments);
- no “external” consultants’ fees were paid.

222 The project was perceived as extremely risky (8.3 km tunnel construction through the Pyrenees; the last similar project, the Channel Tunnel, had been universally acknowledged as a financial “fiasco”; there were no guarantees on traffic from the public sector; all construction risk was allocated to the private sector) and the private sector was not ready to fund the 100% project cost. Under these circumstances, the Spanish and French Governments understood that in order to raise the private
interest, public contributions had to be provided. To minimize the financial impact, and as EC funding was already granted, both governments requested EC TEN-T funding up to the maximum level (10% of public contribution).

**PPP Features**

223 The concept of applying a PPP model was fixed by an international treaty of 1995 and the contract has been granted through a bi-national tender process as defined by the EEC Directive 93/37 under the supervision of the French and Spanish States.

224 The structure of the project was a BOT (Build Operate & Transfer) scheme with major design responsibilities on the public side with the following structure:

**Perpignan-Figueres High-Speed Railway – Concession structure**

225 The contract was structured as a 50 year concession, with a construction period of 5 years and an operation period of 45 years. Once built, the high-speed rail network will be open to all rail competitors, for both cargo and passenger traffic. These companies will pay access charges to TP Ferro for the use of the network. This project was also important in the light of Rail Sector Interoperability issues.

226 The main users will be RENFE and RFF, the national rail monopolies of Spain and France, respectively. These companies are the only rail companies operating high-speed rail passenger services in Spain and France (and no competition is currently foreseen in high-speed rail lines in Spain or France). Cargo traffic will use the network at normal speed. RENFE holds most of the cargo rail market in Spain and RFF is still a monopoly in France.

227 There was an effective and full transfer of risks (construction, traffic, and operating risks) to the private concessionaire. In fact, the idea of both Spanish and French Governments was always to allocate all risks to the concessionaire and provide short term public contribution instead of long term guarantees. This is why the demands for guarantees to be presented during the first tender were not accepted.

228 Operation risk is entirely allocated to the concessionaire, with heavy penalties to pay if the network is not fully available or if delays take place inside the network.
Traffic risk is also allocated entirely to the concessionaire, as no minimum traffic guarantees have been provided (these were sought by the winning bidder on the first tender and caused its cancellation).

Overall, then, most project risks have been allocated to the concessionaire, subject to provisions for negotiations in the event of financial difficulty of the concessionaire.

Finally, there are provisions in the concession contract to avoid the project from going bankrupt. In these situations, the provisions state that there will be a renegotiation of the concession contract but do not provide any specific guarantee to private sponsors.

EU Regulations

EU monitoring process

Considering the simple monitoring in place for this project and strict EU procedures, there is additional documentation that needs to be drafted to fulfil the EU requirements each time physical payments are requested. While the Spanish and French Governments monitor the concessionaire on milestones, such as the beginning of the tunnel drilling, the EC releases payments based on project cost actually incurred.

This creates a problem not only as additional documentation has to be drafted while fulfilling the EU funding application, but also some documentation and information is not available to the Spanish and French Governments. This needs to be specifically requested from the concessionaire.

This project, however, was carefully planned and this issue was foreseen. The concession contract includes the obligation for the concessionaire to provide all information requested by the public sector and be responsible for all administrative procedures.

EU payment availability

Another constraint is the impossibility for the EC to make fund payments according to milestones.

According to the concession contract, public contributions (including that provided by the EU) are paid by the two national governments following the meeting of project milestones. When payments are due, the Spanish and French Governments have to advance the TEN-T part of public funding without fully knowing when and how much funding will be received from the EC as the decision as to the amount had not been taken at that stage. This is a constraint to all hybrid PPPs, as creativity in the structuring may provide a better deal while the EC payment availability does not allow it, so the awarding authorities have to bridge the EC grants.

EU budgetary period

This project runs through 2 different budgetary periods, 2000-2006 and 2007-2013. The project was a TEN-T priority and budget was awarded for construction during the period 2000-2006 and the first 2 years of the next budgeting period (until 2009, the same year construction will end).

Although the public sector is frequently the underwriter of EC funding in hybrid PPPs, uncertainty over the flow through of EC funding may become an issue for national governments with weak credit ratings, particularly if the proportion of EC funding is at the 85% level rather than the 10%, as it was here.

Main Difficulties

Unsuccessful previous tender

The full tender process was initially launched in 2001, but it was cancelled as a contract failed to be signed with winning consortium. The reasons were mainly the open tender (main issues were not clearly defined and had to be extensively negotiated) and late amendments proposed by the preferred bidder.

New tender launched in June 2003 was more restrictive with tighter deadlines

There was very little scope for negotiation of the concession contract in the second tender. This led to the bidders working under tight pressure to submit their bids on time, as the project had to be carefully
analysed by the private sector prior to submission. Obviously, no bid is submitted without careful analysis for any project. However, if there is room for negotiations when the preferred bidder is selected, some issues may be left open to negotiation (which implies that not all decisions need to be made when the bid is submitted) and risks underestimated when submitting the bid may be dealt with during subsequent negotiations.

241 Additionally, financial close was required a year after concession contract signing or the concession contract was cancelled. Financial agreement was signed 1 week before the deadline, putting under high pressure to all parties involved during financial negotiations.

**Risky construction**

242 Technically the most risky element was the construction of an 8.3 km tunnel under the Pyrenees. Tunnel construction is probably the riskiest construction factor in the road and rail sector as for obvious reasons it is impossible to foresee the terrain to drill. The consequences are both delays (if rock drilling is harder than envisaged, for example) and cost overrun (if additional equipment is needed or if more concrete is used to secure the tunnel, for example). In this case, cost overrun risk was limited, as the tunnel amounted to just a third of the overall construction cost, minimising the impact on total cost of a cost overrun in the tunnel construction. However, considering the length, 8.3 km, the risk of delays due to unexpected drilling difficulties was high. This risk was mitigated for the concessionaire by the payment of liquidated damages for delay up to a cap of €22 M.

**Main Lessons Learned**

**Value for Money**

*Value added by the Hybrid structure*

243 The EU co-financing created value for the national government as it reduced the financial commitments that would have otherwise been made to the sponsors. This reduced the discounted cost of the project for the national budget.

244 According to some interviewees, when the project was first tendered, the winning consortium held the view that no bank would be interested in the project the way the PPP was structured and demanded additional guarantees. Not enough emphasis was placed on project structuring prior to tendering. As both governments were not prepared to provide those guarantees, no agreement was reached to sign the concession contract and the tender was cancelled.

245 As in any PPP structuring process, be it hybrid or not, governments officials need to understand that the project must be structured in a way that is financially attractive (profitable) not only for the public sector, but also for the private sector, especially the financial institutions providing the external private funding. If not it will be impossible to reach an agreement with the private sector.

**Institutional framework**

*Planning*

246 From the planning point of view this project is an excellent example of what should be carried out. The project did not only fit into both Spanish and French long term transport planning. What is more important to our analysis, the EC had selected the project as one of its priorities from a transport infrastructure perspective and co-financed the studies.

247 The involvement of the CIG body has been universally praised as one of the success factors. This is a fine example of an overall body being awarded project responsibilities. Similar structures are advised to be applied not only when there are several governments involved, but also when several institutions have responsibilities in the awarding of the project inside one single country. This single body improves coordination and provides common ground where differences can be sorted out.

248 This case also highlights the importance of developing planning knowledge and capacity building, as it allows planning developed with minimal external advisers, reducing costs and increasing coordination.

249 The outsourcing of design works to the future users, especially when they are SOEs, allows for a clear definition of project technical objectives, which eventually helps the project to provide the output expected.
Legal framework

250 One issue specific to this case study, compared to the others, is that the legal frameworks for PPPs in both countries were already developed and tried and tested when the project was launched. For example, although the project was ratified by the Ministries’ Board in France and in Spain this step was not necessary and the process did not require parliamentary approval, neither in France nor in Spain, as there was a PPP law under which the project was awarded.

251 Considering the above, this project is a good example of the advantages a legal and stable PPP framework provides to any country when awarding PPPs. The process is then easier to handle as approval of the concession agreement is easier and the private sector is well aware and has experience of the implications and obligations of the PPP and fewer or no guarantees need to be provided to overcome uncertainties.

EU procedures

252 The tender fully complied with EU procedures with no legal challenges either for environmental or for procurement issues being experienced.

253 A valuable lesson is that careful assessment was carried out every time a decision was made to check whether it complied fully with EU procedures. As an example, after an analysis of the EU procedures and considering that decisions had be valid under the law in both countries, an additional administrative act had to be legally created by both administrations to provide legal administrative support to decisions made.

254 This careful review of every decision took time and effort, as well as it required a deep knowledge of EU regulations. However, as other projects in this Report show (e.g. Athens Ring Road), future court decisions due to non-fulfilment of EU rules may bring cost overruns and delays.

Tender process

255 There are many lessons to learn from the running of the tender process. This case study shows why a project may fail even under a stable and existing legal PPP framework with experienced parties involved if the tender process is not properly structured.

256 The main reason why the project failed is because the tender requirements were too open. This led the Spanish and French Governments to lengthy negotiations to define the project with the winning consortium. Eventually the private sector came to the conclusion that the risk allocation to the private sector was excessive and the project was not bankable, demanding additional guarantees before the deal was signed.

257 When the tender was cancelled, the Spanish and French Governments went back to the drawing board, correcting the reasons that rendered the agreement with the concessionaire impossible to reach.

258 The financial profitability of the project for the private sector was reassessed and it was decided to leave the sponsors to decide the return they needed for the full allocation of risks. This was done by introducing as the most important awarding criterion the public contribution requested (the other factor was the technical quality of bidders, but being all bidders big European construction companies, all qualified). This meant that it was up to the each bidder to decide the level of return they expected to receive according to their respective construction costs as the revenue estimates were similar and the risks were clear in the second tender.

259 Finally, the tender and negotiation process was changed. A concession contract based on the contract previously agreed for the cancelled tender was provided to tenderers with little room for change. The project was defined to a greater extent in the tender documentation, so all obligations and rewards (except for the public contribution which had to be decided by the bidders) were clear. Additionally, the tender provided a short negotiation period as well as a deadline for closing private financing once the PPP agreement with both Spanish and French Governments was signed.
260 Summarising the lessons learned:

1. An open tender, i.e. a tender where the project terms are not highly detailed, is unlikely to be the most appropriate procurement route. In those situations, if the objectives sought by the awarding authority are not correctly explained, the expectations of the public sector may be difficult to meet.

2. When the first tender was cancelled, the concession contract negotiations were almost finished. The Spanish and French Governments decided to use this document as the basis for the new concession contract, improving it before re-release.

3. The deadlines imposed by the tender for negotiations with the awarding authorities and for financial close were difficult to meet but helped to focus efforts on solving the main issues. The pressure and consequences of tight deadlines should however be balanced with the benefits.

Fiscal impact and fiscal governance mechanisms

Fiscal impact

261 Fiscal impact is short term (public subsidies) and limited as no guarantees are provided and the project had been co-financed by the EC up to 5% of the project cost.

262 As a result, this project is a fine example of how to minimize the fiscal impact of projects in the long term, thanks to the private sector being allocated most of the risks (with little uncertainty remaining for the public sector) and no guarantees being provided.

Monitoring

263 The CIG is also responsible for project management during the life (50 years) of the concession and monitors the works.

264 Monitoring was designed with the idea in mind that it should be simple. The most important awarding criterion was the public contribution requested by the bidders, so the outturn construction cost was of no concern to the public sector, as the contract clearly stated that it was not possible to request additional public funds in the case of cost overruns.

265 Considering these two issues, the simplicity and the unimportance of construction cost, the monitoring process was designed based on the fulfilment of easily monitored milestones. Public contribution will be disbursed in 10 settlements and most of them are based on the project reaching milestones which are easy to check (financial agreement signed, works start, drilling start and similar) save for a few cases (60% of drilling mark achieved).

266 This means that monitoring is easy to carry out and no external engineering firms are hired to control the concessionaire. However, it is only thanks to the design of the tender, with no concern attached to project cost, and the nature of the project, that this monitoring procedure is possible. Other public works, such as Athens Ring Road, need a more complex monitor procedure.

Specific Issues about Replicability of the Model

267 This project provides a model for replicability and should be considered an example of how EC institutional support may help to deliver PPP projects, particularly those with cross-border implications (Motorway axis Igoumenitsa/Patra-Athina-Sofia–Budapest, Railway axis Athina–Sofia–Budapest–Wien–Prah–Nürnberg/Dresden, Railway axis Gdansk–Warszawa–Brno/Bratislava-Wien, Motorway Gdansk–Brno/Bratislava-Wien, Rail Baltica axis Warsaw–Kaunas–Riga–Tallinn–Helsinki and Railway axis of the Ionian/Adriatic intermodal corridor). Obtaining the EC institutional support from the initial planning stage should be considered as a valuable asset to turn the project into a success story.

268 Another issue for replicability is the applicability of the tender process. Considering the lack of experience of local firms in PPPs in New Member States, procurement should make use of the Competitive Dialogue procedure currently being introduced.
Summary

269 EU involvement was essential during the analysis phase, co-financing the studies and providing institutional support.

270 Co-financing was approved before the tender launch.

271 EU co-financing amounted to 10% of the public contribution. As a result, it was not essential to close the financing gap, although it helped. The co-financing level is expected to increase to 20%.

272 The hybrid PPP structure proved to be highly successful and replicable for cross-border projects.

273 Each decision/administrative act carried out was assessed in light of EU procedures.

274 EU monitoring procedures differ from the Spanish and French Government monitoring procedures.
## N1/M1 Dundalk Bypass

| Description | This project lies on the N1/M1 Dublin - Border route and actually consists of the following two real toll road projects, procured separately:  
1. **A public procurement** to construct the **Drogheda Bypass**, consisting of 21.5km of dual carriageway, 7.5km in County Louth and the remaining 14km in County Meath. This project has been financed by the Irish Government, and partly co-financed by the Cohesion Fund of the European Union.  
2. **A 30 years PPP concession** to:  
   2.1. Design, construct, finance, operate and maintain a new 11 km section of motorway from Ballymascanlan to Haynestown, the **Dundalk Bypass**, along with approximately 7 km of new link roads, 12 over / under-bridges and a major railway over-bridge; and  
   2.2. Operate and maintain 43 km of the existing motorway, **Drogheda Bypass**, from Haynestown to Gormanstown. |
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<td>Rationale</td>
<td>The main reason for the combination of the two projects was an expectation that better operational and managerial efficiencies would be achieved and that more revenue would be generated from tolls.</td>
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| Total value | The values of the projects were, respectively:  
1. **Drogheda Bypass**: The total approximate cost of the project was €246 M.  
2. **Dundalk Bypass**: According to the NRA, if the public sector were to undertake all the works in the contract that it would cost approximately €340 M, excluding land costs, with the construction element amounting to €160 M. |
| Financing | 1. **Drogheda Bypass** was financed by the Irish Government. Out of the total eligible costs of €61 M\(^\text{10}\) of the second section of the road, €52 M\(^\text{11}\) was financed by the Cohesion Fund of the European Union under the National Development Plan (2000–2006). There was no EIB or commercial funding on this project.  
2. **Dundalk Bypass** was funded by the CRG consortium.  
   2.1. The total debt amounted €145.5 M and consisted of:  
   - €68 M commercial bank guarantee facility for EIB loan,  
   - €37 M commercial bank loan,  
   - €17.5 M equity bridge and  
   - €23 M standby facility for cost overruns.  
   2.2. The leading lender was Societe Generale (SG) with four co-arrangers: Allied Irish Bank (AIB), DEPFA, KBC/Ilb and Instituto de Credito Oficial (ICO) banks.  
   2.3. Project sponsors provided €18 Min equity. |

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\(^{11}\) [OJEC C70/14](http://www.mic.org.mt/AGGORNAT/specialEdition/AGGSE12e_EU_Funds.pdf)
### EU Funding

1. **Drogheda Bypass**: The road consists of three sections. In the second section, €52 M\(^{12}\) was co-financed by the Cohesion Funds under the National Development Plan (2000–2006).

2. **Dundalk Bypass**: did not include any EU funding.

### PPP Scheme

1. **Drogheda Bypass** was a public procurement, not a PPP.

2. **Dundalk Bypass** was the second (after N4/N6 Kilcock-Kinnegad) PPP scheme contract to be signed by the NRA. It was a typical DBFO scheme, where CRG were required to Design, Build, Maintain, Operate, and Handback.

Under the terms of the contract, the NRA made no payments to CRG. Moreover, until completion of the Dundalk Bypass, CRG had to pay 95% (which is estimated at €18 M) of the toll revenue collected at Drogheda to the NRA. CRG will also pay a share of the future toll revenues above specified traffic volumes to the NRA during the remainder of the concession period as a mechanism to prevent windfall profits in the event of exceptional traffic growth.

### PPP Actors – Winning consortium

1. **Drogheda Bypass**: The motorway was designed by NorthConsult and managed by Meath National roads Design Office. The main contractors were SIAC O’Rourke JV, SIAC Cleveland Bridge JV and Uniform Construction. NTR Ltd. had been temporary operator for the public sector toll facilities.

2. **Dundalk Bypass**: The winning consortium, Celtic Roads Group (Dundalk) Ltd (CRG) comprises:
   - Dragados Concesiones de Infraestructuras SA - a subsidiary of ASC-Dragados;
   - the Netherlands based HBG Group (Hollandse Beton Groep NV), which is part of Royal BAM, operating through two subsidiaries:
     - Edmund Nuttall Ltd (UK)
     - Ascon Ltd (Irl)
   - NTR plc (Irl) - National Toll Roads plc.

### Construction period


2. **Dundalk Bypass**: The Contract was awarded and construction commenced in February 2004 with a target completion date of February 2006. However, the road was actually opened on 26 September 2005, i.e. 4 months ahead of schedule.

### Operation period

The contract duration is 30 years from concession signature on 5 February 2004.

### Rationale for choosing the project as a case study

This structure is not a pure hybrid structure, as it actually consists of two separate projects; which together form one road: one is a typical PPP project; the other was publicly procured using Cohesion funding. There was never an intention to combine the two projects. However, due to the circumstances encountered, the two projects were linked, and this and this has been successful.

The key success factors in this combination were:

1. There was no need to coordinate the timetables of applying for the EU money and bidding for a PPP project;

2. The private bidder on the Dundalk Bypass did not have to assume the risk of receiving the EU funding.

We conclude that the above factors are also conditions for any successful hybrid project.

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\(^{12}\) OJEC C70/14
Project History

275 In the late 1990’s the Irish Government formulated the National Development Plan 2000-2006 (“NDP”) with public investment of nearly €52 billion in the Irish Economy over its six to seven year span. The Irish Government has stated that one of the key elements of the NDP’s strategy was to significantly upgrade the physical infrastructure in Ireland. Consequently, €28.7 billion of NDP expenditure has been allocated to economic and infrastructure investment. It was planned to invest nearly €6 billion in national roads improvements and maintenance over the seven years on over 100 road projects.

276 The National Roads Authority (“NRA”) was formally established as an independent statutory body under the Roads Act, 1993. Its primary function is ‘to secure the provision of a safe and efficient network of national roads.’ For this purpose, it has overall responsibility for planning and supervision of construction and maintenance works on these roads.

277 The Irish Government’s sources of capital funding for the national road improvement programme were:

- European Union assistance;
- Exchequer (or National) resources; and
- Private Sector Investment.

Drogheda Bypass

- 2000: Construction starts
- May 2003: Collection of tolls starts
- June 2003: Operation starts
- Sept 1993: Tender cancelled. Bidders requested to resubmit bids
- Feb 2034: Concession handback

Dundalk Bypass

- 1990s: Need for Dundalk Bypass considered
- 1999-2001: PPP assessed
- 2001: Decision to go ahead as a PPP
- OJEC issued
- 2002: Planning challenged; NRA won the challenge
- Aug 2003: BAFO submitted
- Sept 2003: Preferred bidder selected
- Feb 2004: Financial close
- Construction starts
- Sept 2005: Construction completed
- Operation begins
- Feb 2034: Concession handback
Financial assistance from the European Union for investment in national roads over the period of the National Development Plan, 2000-2006, was expected to total €800 M, made up of €530 M in aid from the European Regional Development Fund (ERDF), €231 M from the Cohesion Fund and €40 M from the TEN-T fund.

The Irish government had to allocate its limited resources while taking advantage of available EU funding. It decided to promote four project applications, including the M1 Drogheda Bypass, to the EC to access Cohesion funding of €231 M for national road projects in the period 2000-2003:

Drogheda needed grant funding as the economics of the project indicated it was not a feasible project on a stand-alone basis. This was due to the forecasted revenue being too low compared to the capital investment.

At that time the NRA was pioneering a move in the direction of Design & Build contracts as an alternative method of procurement. The PPP concept was still not well known in Ireland, there was no political environment for PPP, and lack of adequate knowledge. Therefore the NRA decided to procure the M1 Drogheda By-Pass scheme using the conventional re-measurement Form of Contract as prescribed by the Government Contracts Committee.

At the same time, during 2000-2006 the NRA worked towards the identification and evaluation of schemes suitable to attract private funding. The NRA was mandated by Government, to implement a Public Private Partnership programme and secure at least €1.27 billion EUR from the private sector towards the overall planned investment in the national roads improvement programme. The Dundalk Bypass was one of a total of eleven schemes in the national road improvement programme that were identified for development as PPP projects. PPP road schemes were to be carried out on the basis of DBFO contracts with a long-term concession period. The Dundalk Bypass was the third project to be bid, following on from the N4/N6 Kinnegad to Kilcock motorway and the Waterford Bypass.

It was decided to structure the Dundalk Bypass as a PPP in order to:

- Increase efficiency;
- Transfer risk to the private sector; and
- Bring more private finance to the roads and get the best value from the toll roads.

Also, Dundalk’s economics were very good due to its location between the two capitals and the proximity of the airport.

It is worth stressing that these two projects, Drogheda and Dundalk, were procured separately. When the Drogheda Bypass went to planning within the National Development Plan 2000-2006 there was only a broad intention to continue the road up to the border, but no specific plans, with a consequential impact on the traffic levels that could be forecast for Drogheda on its own. As at that time the Irish government struggled with financing the project on its own, but as the Cohesion funding for Ireland was available, it decided to take advantage of this. As with all projects at that time, Drogheda Bypass was procured via a traditional procurement route.

When in 2001 it was decided that Dundalk Bypass was to go ahead, the situation was different. The economy was booming, hence the government had more money, the availability of Cohesion Funding was reduced, and the PPP concept was becoming more popular. Therefore, the Dundalk Bypass was one of the first projects realised by the National Roads Authority (“NRA”) in its PPP programme.

Background information

At a national level, the Drogheda Bypass provides a new motorway section of Euroroute E01 linking the major commercial seaports at Larne, Belfast, Dublin and Rosslare and the major airports of Dublin and Belfast. It also forms part of the Trans–European Road Network.

At a regional level, the scheme forms an essential part of the strategic M1 motorway extending northwards from Dublin along the principal cross border route providing access to Belfast and the

13 NRA, Annual Report, 2002
ports in Northern Ireland. As well as improving journey time and safety for traffic travelling between Dublin and urban centres in Northern Ireland, it also provides a service for towns in between such as Swords, Balbriggan, Drogheda and Dundalk. This has been a massive improvement, as it used to take at least 2 hours to drive to Dublin, and now it is about an hour.

289 The Dundalk Western Bypass scheme forms part of the strategic north-south road corridor Euroroute E01. Euroroute E01 is part of the Trans-European Road Network proposed by the European Union. It forms part of the link (along with E30) of the three largest centres of population on the island (Dublin, Belfast, and Cork) and provides access to the main commercial seaports and international airports.

PPP Features

290 It was not initially the intention to combine the two projects. When the Cohesion funds were made available the NRA had a number of projects to fund and Drogheda was deemed higher priority. However when the PPP programme was developed it was recognised there were synergies to be gained through combining the two projects. The overlap between the projects results from the fact that the winning bidder on the Dundalk Bypass was supposed to also take over operation and maintenance of the Drogheda Bypass. Tolling of the Drogheda Bypass was an integral part of the Dundalk PPP scheme.

291 The terms of the tender provided for a minimum amount of toll revenue collected on the Drogheda Bypass that had to be passed to the NRA during the construction of Dundalk Bypass. The purpose of this provision was to provide an incentive to the private sector to complete the Dundalk Bypass on time. The winning bidder, the consortium of Celtic Road (Dundalk) Group Ltd (“CRG”), bid and brought this amount up to 95% of toll revenue. CRG’s willingness to accept such a high level of volume risk resulted from their view on the economics of the project and confidence in the traffic levels. The bidders could have also requested some subventions from the NRA, but CRG chose not to.

292 NRA made no contributions to the Dundalk Bypass. The toll revenue on Drogheda which passed to NRA (estimated at €18 M) during construction of Dundalk was used by the Authority to finance other road projects.

293 The contribution from the Drogheda project financed with EU money covered the financing gap.

**Dundalk Western Bypass – Concession structure**

[Diagram showing the concession structure with various parties involved such as National Roads Authority, Commercial banks, EIB, Road Users, etc., along with financial flows and agreements like Concession agreement, Design & Construction contract, Operation contract, etc.]
The Dundalk Western Bypass PPP scheme involves:

- The construction of a new 12-km bypass, the Dundalk Western Bypass;
- The tolling of approximately 15-km on the southern end of the M1 Northern Motorway, comprising the Boyne River Bridge. The operation of tolling would start six weeks after the award of the contract;
- Operation and maintenance of approximately 42-km of Existing Road, comprising the Dunleer-Dundalk Motorway, the Dunleer Bypass and the Northern Motorway from three months after the awarding of the contract; and
- Operation and maintenance of the New Road, once it has been completed.

Consortia were invited to bid for the project on the basis of a design, build, finance and operate contract under a long-term concession of approximately thirty years.

Bidders could have bid for upfront payments or payments over time so the final financial structure was the commercial decision of the winning bidder.

The financing structure of the transaction envisaged that during construction of the Dundalk Bypass CRG would collect tolls on Drogheda Bypass, and pass the revenue to the NRA. Toll collection started 6 months before the Dundalk contract awarding date. Prior to being awarded Dundalk contract, CRG had to pass all the tolls to the NRA. From the date of awarding the new contract, the toll income was shared between the NRA and CRG on a 95:5 basis.

The private sector assumed construction and traffic risk, whereas the authority – procurement, archaeological, insurance and force majeure risks. Nevertheless, the risk allocation was kinder towards the private sector than on N4 Kilcock – Kinnegad, which was the first PPP road project, and imposed hard terms on the concessionaire. On Dundalk the EIB helped to negotiate such better terms, in order to make the project more bankable.

One risk accepted by the private side was unusual. It was responsibility for the road (Drogheda Bypass) that had already been built, and hence the latent defect risk.

The NRA were very pleased about the results of the VfM analysis. According to the NRA, if the public sector were to undertake all the works in the contract that it would cost approximately €340 M, excluding land costs, with the construction element amounting to €160 M.

The PPP project was completely separate from the project involving Cohesion Funding. Therefore there were no changes in the contract due to use of the EU funding.

Refinancing is envisaged in the future, as is typical for PPP projects.

EU Regulations

No specific issues raised or noted.

Main Difficulties

The following were the key challenges on the project:

1. Coordination of the timetables on Drogheda and Dundalk. Drogheda was opened when the private partner on the Dundalk was still not selected. This was resolved by the NRA by appointing a temporary provider of operations and maintenance in Drogheda;

2. Unknown level of defects on the existing road (Drogheda). As CRG was obliged to pay 95% of the toll revenue collected at Drogheda to the NRA, CRG had to perform extensive due diligence on the state of the road and existing contracts on the Drogheda Bypass. The exercise proved the Drogheda Bypass was in a very good condition;

3. Challenge against planning on Dundalk, which was won by the NRA.

According to the parties interviewed the procurement went smoothly, and took only 3 months from announcing a preferred bidder to the financial close. No other complexities have been identified.
Main Lessons Learned

The key reasons to carry the project out as a PPP were:
- Financing from the private sector;
- Risk transfer; and
- Certainty about construction costs.

The authority offered a bankable contract at the outset of the procurement, which saved time and cost to all parties.

The key reason to combine the two projects as a hybrid PPP was the private sector ability to generate more revenue on tolls.

Institutional framework

The NRA was responsible for analysing and preparing the project, as well as for awarding and management of the tendering process.

However, the NRA’s power to implement the PPP programme was underpinned by the decision of Government in the 2003 Budget to implement a multi-annual funding arrangement, rather than the long standing practice of an annual budgetary allocation process. This arrangement commits to continued substantial investment in national roads over the next five years involving Exchequer funding of approximately €7.17 billion EUR over the period 2005-2009, which will be supplemented by overall private sector investment of €1.36 billion EUR bringing total anticipated expenditure in the national roads programme to €8.53 billion EUR over the five year period.

Legal/regulatory framework

General legislation already existed to facilitate PPPs in Ireland, but not specifically for this scheme. The purpose of the legislation was to enable the public bodies to enter a PPP transaction. Existing legislation was sufficient for this project.

The impact of this transaction on the public budgets was twofold. On one hand it was nil, as the NRA did not make any payments, but on the other hand it freed up funds to facilitate other infrastructure improvements.

The NRA did not give any guarantees on the Dundalk Bypass.

Specific Issues about Replicability of the Model

The issues about combining the EU funding with the PPP structure include:
- PPP projects and EU grants have different, but when combined, congruent objectives. The possibility to use a PPP structure implies good economics for the projects, which are then feasible on the stand-alone basis. EU grant funding is designed for the projects which are less than self-sufficient, and need external help. In such situations EU funding is supposed to act as a catalyst to such projects;
- The private sector is not interested in getting involved in grant funded projects if it has to bear the risk of the government applying for and receiving the grant funding. As the private sector does not want to accept the risk of not receiving the grant money, it usually requests underwriting of the risk;
- An additional difficulty arises when the timetables of applying for grant funding and bidding in the PPP tender would have to be harmonised (as the contract would need to have been signed); and
- Also, if up to 85% of the project costs can be grant funded, there is not much left for the private financing. The introduction of grant funding into the project gives less incentive for the private sector to support such a project. The economics of the project do not work well for the private sector, which is not able to generate the required returns. It also results in less than optimal risk allocation.

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14 NRA Annual Report, 2004
However, according to our interviewees the above structure is replicable. The key success factors on this transaction were:

1. The NRA had certainty about the amount of Cohesion Funding received before the Dundalk Bypass started. The private sector did not have to request underwriting of the risk of not receiving the EU money.
2. There was no need to harmonise the timetables for applying for the Cohesion Funding and bidding for the PPP projects.
3. The Drogheda Bypass was already operating when the procurement for Dundalk Bypass was announced. The bidders competing in the tender for Dundalk had readily available information about the traffic levels on the road and better projections as traffic at Drogheda would give a very good indication of traffic at Dundalk.

**Summary**

The two projects originally developed separately: Drogheda Bypass as traditional procurement cofunded by the Cohesion Fund, Dundalk Bypass as a PPP. They were combined at a later stage. The rationale for the combination was the ability of the private sector to generate more toll revenue. The combination was a coincidence, rather than an intended structure, and it was successful thanks to favourable circumstances;
## Athens International Airport

| Description | The airport is located 30 km east of Athens and replaced the old airport of Athens. It has a capacity of up to 16 million passengers annually for national and international flights and scope to expand to a capacity of 50 million.

The need for a new airport for Athens was recognised, as the old airport suffered from overcrowding. The new airport was designed with the idea of Athens becoming a hub between Europe and the Middle East as well as developing Greek international destinations. |
|---|---|
| Rationale | The PPP structure was sought as a way to allocate most risks to the private sector. Additionally, the Greek Government was suffering a high government deficit (16.2% in 1991) and resources were scarce so the involvement of the private sector was needed.

The hybrid nature of the project was due to the need of financial resources. In order to minimize public contributions, the EU support was requested (the Cohesion Fund). Additionally, as the sponsors needed external private financing, the EIB was included offering to cover 47% of project cost with a very long financial maturity (25 years, longer than that offered by commercial banks). The financial contribution and the loan conditions made the project more attractive for the private sector. |
| Total value | The agreed total project cost (per an appendix of the Concession Contract) during construction amounted to €2,109 M. |
| Financing | Of the overall budget 47% was an EIB (European Investment Bank) loan, 15% came from commercial banks, 12% from the Greek airport development fund, 11% from EU grants, and 7% from the Greek State. Equity funding from the sponsors contributed 8%. |
| EU Funding | An amount of €250 M was provided by the EU Cohesion Fund. However, this figure was later reduced by €12.7 M due to a breach of obligations by the Greek State and costs not incurred. |
| PPP Scheme | Hybrid BOOT |
| PPP Actors – Winning consortium | The concession is held by Athens International Airport SA, a public/private partnership between majority holder, the Hellenic Republic (55%), and a private consortium (45%) led by Hochtief AG. |
| Construction period | 5 years |
| Operation period | 25 years |
| Rationale for choosing the project as a case study | 1. Hybrid PPP with funding from both European Union and private sources involved, though almost 50% came from European Investment Bank.

2. One of the largest new airports ever built

3. The public sector is the major sponsor (55% shareholding in the SPV) |
**Project history**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>First study identifies a need for airport</td>
</tr>
<tr>
<td>1976</td>
<td>Second study confirming previous study</td>
</tr>
<tr>
<td>1979-1980</td>
<td>Master plan completed</td>
</tr>
<tr>
<td>Mid 1980</td>
<td>Excavation works begin</td>
</tr>
<tr>
<td>June 1991</td>
<td>Tender released</td>
</tr>
<tr>
<td>Sept 1993</td>
<td>Tender cancelled. Bidders requested to resubmit bids</td>
</tr>
<tr>
<td>Dec 1994</td>
<td>Preferred bidder selected (Hochtief)</td>
</tr>
<tr>
<td>July 1995</td>
<td>Concession agreement signed</td>
</tr>
<tr>
<td>Late 1996</td>
<td>Parliament ratifies contract</td>
</tr>
<tr>
<td>July 1996</td>
<td>Financial closing</td>
</tr>
<tr>
<td>July 1996</td>
<td>Construction commences</td>
</tr>
<tr>
<td>Oct 2000</td>
<td>Construction completed. Trial period commences</td>
</tr>
<tr>
<td>Mar 2001</td>
<td>Trial period ends. Operation commences</td>
</tr>
<tr>
<td>2026</td>
<td>Concession hand over</td>
</tr>
</tbody>
</table>

319 The need for a new airport was identified and the first study of its possible location was carried out in 1971. Five years later, in 1976, the government confirmed the intention to build a new airport and the second study was carried out, also recommending the same location. Spata, 30 km from the centre of Athens, emerged as the most suitable place for an international airport. In 1979 and 1980 the Master Plan was completed, and excavation works began.

320 The first real tender for construction and operation (the project being planned as a BOOT) was released in June 1991. The consortium led by Hochtief AG was chosen as the preferred bidder and negotiations began. In September 1993, the Greek government changed due to elections and the tender was cancelled. The final bidders from the first tender were asked to resubmit their bids and a negotiation procedure with both of them began. In line with the modified tender the Greek state would keep a 55% instead of the previously agreed 40% stake in the airport. In December 1994, the preferred bidder, once again the Hochtief consortium, was selected. The concession agreement was signed in July 1995.

321 During the tendering process the Greek government was advised on financial matters by Salomon Brothers. The other financial advisor to the Greek State was ETEBA, which merged with the National Bank of Greece S.A. in 2002; among other duties ETEBA was involved in the preparation of the application to the EU/Cohesion Fund. The Greek State’s legal advisors were Linklaters, the technical advisors were Parsons U.K., and the insurance advisors were Sedgwick Bankrisk Ltd. The financial advisors to the private shareholders were Goldman Sachs, KPMG and BZW, while their legal advisors were Clifford Chance and (locally) Koutalidis Law Office. The EIB was advised on legal matters by Freshfields.

322 The project achieved financial close in July 1996.

323 Construction works took place from July 1996 to October 2000 and were completed five months ahead of the February 2001 deadline, the additional time being used for testing. The testing period lasted until March 2001, when the airport began operation on March 2001.

**Background information**

324 For this hybrid PPP, the involvement of the EC was essential. The Greek State wanted to develop the Airport as a PPP, so that risks were not allocated to the Greek Government while maintaining control over the Airport Company (the company responsible for developing and operating the airport). Additionally, considering the high government deficit in Greece (16.2% of GDP in 1991, when first tender was launched) and the Maastricht Convergence Criteria (maximum deficit allowed 3% of GDP) the resources were limited for a project costing over €2,000 M.
325 The solution was the involvement of the EU and EIB. The EC provided funding directly through the Cohesion Fund. This public contribution helped to structure the project in offering an adequate return to private sponsors (15% return on capital) and reducing the funds the private sector had to provide. This was one of the concerns of sponsors, as they foresaw difficulties in providing 100% of the funding. The EU Cohesion Fund was essential to close the financing gap between the funds available from the Greek Government (through the airport development fund, a special tax levied on air passengers, and public grants) and the funds to be provided by the private sector.

326 Additionally, the EIB provided most of the external financing needed, amounting to 47% of project cost. The EIB financing was extremely helpful because while commercial banks financing had a 13 years maturity, the EIB loan was over 25 years, allowing the sponsors to increase the profitability of their investment as loans could be paid back over a longer period of time.

**PPP features**

327 This hybrid PPP was designed as a BOOT project with the company developing the airport controlled by the Greek Government. The structure allowed the allocation of risks to the private sector and privately financed the project to a great extent while maintaining control in public hands. The project followed this structure:

![Athens International Airport– Concession structure diagram]

**Legend:**
- * Initial shareholders included the Greek State 55%, Hochtief 36.1%, private companies and other sponsors 8.9%. Currently: Greek State 55%, Hochtief Aktiengesellschaft 40% and other 5%
- ** Constructors included: Hochtief, ABB Calor Emaq Schaltanlagen AG and H Krantz- TKT GmbH

328 Based on the concession contract, most risks were allocated to the concessionaire, without recourse to the Greek Government. This implied a full transfer of construction risks to the private sponsors. Operation risk was almost fully allocated to the concessionaire, with just the operation of navigation equipment vesting with the Hellenic Civil Aviation Authority.

329 Finally, traffic risk was fully allocated to the concessionaire, without a minimum level of traffic guaranteed in the contract.

330 However, the concession contract also awarded an exclusivity area of 50-100 km and certain rights on the tariffs in the rest of Greek airports (for a certain period of time or until the Athens Airport passengers reaches an agreed level). The fact that there is no immediate alternative airport limits competition and results in more inelastic demand than would normally be expected.
It should also be noted that the Greek wholly state-owned flag carrier (Olympic) represents approximately 55-60% of the airport traffic and its present financial condition is a significant risk factor (currently its survival is in doubt as the EU has requested the airline to pay back as much as €540 M in illegal state aid).

On the other hand, the Airport concessionaire was allowed to freely set tariffs at a capped level needed to obtain an annual return of 15% over capital, as well as to cover the operation expenses, depreciation of assets and interests paid. This implied that operation risk was reduced (as rates could be increased to cover under-recovery of operational cost), that construction risk was reduced (as a higher construction cost was reflected in the higher depreciation of assets), so that overall project risk was significantly reduced.

Additionally, the Greek State was obliged to guarantee the financing provided by the European Investment Bank, and until December 2007, to guarantee all debt service coverage ratio requirements not met by the Airport Company by means of a subordinated and unsecured loan as well.

According to some sources, the revenues from the airport non-airside commercial activities (duty free zone, parking, restaurants, business centre, etc) will account for 20% of the total project revenues while tariffs will provide the remaining 80%.

EU regulations

EC tendering rules

The EC involvement (through the Cohesion Fund) was requested once the concession contract had been signed. The reason is because it is not possible to request the co-financing until the concession contract has been signed.

In the Athens Airport project, problems arose regarding the procurement procedures followed. Legal issues began when the first tender was cancelled and the Greek Government opened negotiations for a new contract launching a new limited tender procedure with the two Consortia previously shortlisted instead of putting out a new call for tender. One of the Consortia, led by French Dumez GTM, who submitted a bid for the cancelled tender procedure and was not invited to negotiations for this new tender procedure, protested to the EC. The EC prompted the Greek Government to provide additional information and penalties were considered, but finally no action was taken against Greek Government.

However, in 2005 the EC decided to reduce the assistance granted to the project as the airport did not comply entirely with the eligibility rules of the Cohesion Fund and did not respect publicity and information EU requirements. This meant that the Greek Government faced an additional payment of €12.7 M.

Application procedure

The procedure for requesting hybrid PPP co-financing from the Cohesion Fund is a little different from traditional procurement. In order to calculate the project cost available for co-financing, the revenues are deducted following certain rules, making it impossible to launch the request for co-financing until the concession contract has been signed.

When the contract is signed, EU funding may be envisaged but no official decision has been made by the EC. As a result, there is no certain knowledge of the EU grant level for the public parties.

As the private sector usually does not accept the risk of the EU public contribution being lower than the amount reflected in the concession contract, it is up to the public authorities involved to underwrite the EU grant in the concession contract. Later on, if the co-financing is below the amount expected, the public sector will have to provide additional funds for the project, introducing uncertainty between the public and private sector about future availability of public contribution.

The concession contract for this project included €400 M of EU grants. However, the figure the Greek Government had received until 2001 was €250 M. As a result, when the Greek Government was fighting to reduce the government deficit and meet Maastricht Criteria, an unexpected disbursement of €150 M had to be made.
Another problem, specific to this case and hybrid PPPs, was the difficulty in calculating the revenues, even when the contract had been signed. Not many airports had been designed from scratch, as it was the case of Athens International Airport. The consequence was that the traffic and revenue forecast was difficult which increased the risk for the public sector of being awarded a co-financing level below the figure expected and committed to the private sponsor.

Environmental issues

Although not strictly a constraint, some parties have mentioned that EC co-financing meant that environmental risk had to be more carefully assessed and considered when designing than if co-financing was not used. Environmental issues require adequate planning well in advance, preparing all the required documentation and carrying out the impact assessment properly.

For example, this project required a Cost-Benefit-Analysis (CBA) to be performed when the application for co-financing was submitted. No CBA had been performed prior to that date.

Clawback

Clawback entails the possibility of a future reduction of EC grants already awarded, which means that either the concessionaire or the public sector must increase its contribution.

In this case, in September 2005, the EC decided to reduce its assistance granted to the Athens Airport. The decision was taken in view of the fact that the airport had not complied entirely with the eligibility rules of the Cohesion Fund (using incorrect assumptions on eligible expenditure) and had not respected publicity and information requirements regarding the project. As explained by the EC, these inaccuracies were discovered during two audits performed by the EC and were also based on further information presented by the Greek State. The reduction amounted to more than €12.7 M.

As the Greek State was the underwriter in the concession contract to the concessionaire of all grants to be obtained from the EU, this decision meant that the €12.7 M repayment of grant (about 5%) had to be covered entirely by the Greek Government.

Main Difficulties

Unsuccessful previous tender

The first concession contract was cancelled because the new government decided that it should keep 55% of the concessionaire SPV instead of just 40%, as negotiated by the previous government. As a result, this new tender negotiation delayed the project by almost 3 years.

Evaluation of Offers

In 1994, the newly elected government decided to continue the procurement process which had started in 1991 for the selection of the Greek State’s partner in the airport company. During the evaluation phase the Greek State had to tackle the problem of having to compare and evaluate two offers which had differences in concept. The State had to undergo the process of negotiating with the two winning consortia the submission of additional / supplemental proposals in order for the final offers to be comparable in principle.

Competition Issues

In 1995 the Greek State successfully resolved certain issues raised by the relevant EC authorities (Directorate Generale XV) after an appeal to the EC by a losing bidder. The Greek State had to deal with the procedures and rules which apply on international tenders in order to assure the successful and timely completion of the tender process.

Main Lessons Learned

Value for Money

The EU co-financing created value for the national government as it reduced the financial commitments that would have otherwise been made to the sponsors. This reduced the discounted cost of the project for the national budget.
Sovereign risk at this time in Greece was high, since it was well before Greece entered the Euro in 2001, and well before it was envisaged that they would do so. The availability of funding from the EU co-financing the project mitigated the risk of the Greek Government not having funds in the future to fulfil the public contribution (allocated to the private sector). In light of this, the sponsors could offer a better deal to the Greek Government.

It has been mentioned by some sources that the EU co-financing forced the Greek Government to address in greater detail the environmental issues. This mitigated the environmental risk allocated to the public sector and provided a higher Value for Money to the government as a consequence.

**Institutional framework**

The approval process required a parliament sanctioned law (l. 2338/1995). This law included various other provisions which facilitated the implementation of the project. Furthermore, a Presidential Decree was issued (267/21-08-1996) regarding the approval of the private shareholders foreign funds according to L.D. 2687/1953 (provides “extra/additional” protection to foreign investments in Greece) to provide additional security to sponsors and financial investors.

The lack of a stable and tested framework meant that the approval process was longer and that there was uncertainty that eventually forced the public sector to provide guarantees to the private sector.

**Fiscal impact and fiscal governance mechanisms**

Apart from short term commitments, the Greek Government made long term underlying commitments of up to 50% of the project cost, ie over €1 billion, by guaranteeing the EIB loans to the concessionaire. If the concessionaire had defaulted in the early 2000’s, the Greek Government would have faced a substantial outgoing when budget availability was limited.

**Specific Issues about Replicability of the Model**

This model is easily replicable in the New Member States providing valuable lessons for the structuring of hybrid PPPs because:

1. Financial support from the EU and the EIB were essential, minimising the funds to be provided by the Greek Government, as it will be the case in NMS, Accession Countries. Additionally, NMS and Accession Countries should not rely solely on the EU but also consider IFIs to gain advantage of longer maturities and reduced rates to offer the private sector a more attractive transaction.

2. Transport sector infrastructure development was a priority in Greece as it is a priority in NMS.

3. The legal framework for PPPs had not yet been developed in Greece when the project was tendered. In the Accession Countries, governments are developing PPP laws and the legal framework for PPPs is new.

4. The project included a highly experienced international contractor, Hochtief. Large infrastructure projects in NMS will raise the interest of international construction companies, much more experienced than local officials.

5. The project involved the public control of the concessionaire. In many of NMS, PPPs are perceived as hidden privatisations. The involvement of the EU and the public control of the concessionaire may overcome negative public opinions with regards to PPPs.

6. This project is an example of the effects of a poor assessment and preparation to follow EU procedures. NMS, due to their lack of experience when dealing with the EU, should consider the effects of not fulfilling EU rulings when dealing with hybrid PPPs.
Summary

358 A hybrid structure was essential to the success of the project, co-financing the public contribution and providing Value for Money to the national government.

359 EU involvement was sought when the project was already awarded, so the EU had little influence on the planning and tendering.

360 The original EU grant envisaged in the concession contract was €400 M, although the final figure was €250 M.

361 The Greek Government provided guarantees to the private financers. The EU procedures do not consider these guarantees as eligible cost, although from the VfM perspective, they are considered a cost.

362 Proper monitoring was not apparently in place as the EU reduced the grant awarded (claw back) due to non-eligible costs being claimed and publicity and information requirements not being met. As the private sector was underwritten against this risk, the Greek Government had to increase the financial contribution to the sponsors.
## Constanta Water and Wastewater

**Description**
In order to improve the water and wastewater infrastructure in the City of Constanta and several other towns in the region, the County of Constanta considered a PPP scheme to be established by setting up a special purpose company.

The overall financing scheme involved EU funding in the form of ISPA grant in addition to private equity and loan from the EBRD.

A tendering process to select a private partner was initiated. The tender was brought up to the stage of prequalification and drawing up a short list. As of now, it has not progressed.

**Rationale**
1. Significant investment needs.
2. Need to improve management standards and financial position of the utility
3. Need to comply with EU environmental standards and clean up the Black Sea coast to encourage tourism.

Initially thought to be feasible only via PPP route, with ISPA funding to improve bankability.

**Total value**
More than €200 M.

**Financing**
- A US$75 M loan from the EBRD’s Municipal Utilities Development Programme, linked to previous municipal financing.
- A €20 M loan from the EBRD’s Municipal Environmental Loan Facility for the refurbishment and modernisation of the sewerage system – secured by the Constanta County, linked to previous municipal financing.

Investment contribution at the initial investment phase by the private partner was estimated at between €20 M and €50 M.

**EU Funding**
A €72.4 M ISPA grant for the rehabilitation of wastewater systems and technical assistance.

**PPP Scheme**
A 20 year concession contract for water and wastewater services between a Special Purpose Company and the County was planned.

**PPP Actors – Winning consortium**
RAJAC (water and wastewater utility); EBRD, EC; County Council

Bidders pre-qualified but no winning bidder selected.

**Construction period**
Information not available

**Operation period**
20 years

**Rationale for choosing the project as a case study**
1. It is a municipality project
2. It was prepared in a country outside the EU
3. ISPA funding is involved.
4. The contract has not been signed yet.
Background information

363 The water and wastewater system in Constanta was in decrepit condition: the system was obsolete, water losses reached 66% of water intake, the performance and operational standards were poor and the entire system did not meet the EU environmental standards. The County of Constanta, the owner of the water and wastewater utility RAJAC, believed that Private Sector Participation would increase the chances for implementation of the ambitious, yet necessary investment programme and would ensure improved management and standards of service.

364 The concept of adding ISPA funds to the overall financing structure was developed when the PPP preparation process was advanced and was possible to be implemented thanks to the agreement of the European Commission.

PPP Features

365 The PPP scheme was to be implemented by setting up a Special Purpose Company (SPC) financed with equity from a private sector investor, selected in the competitive tender. The SPC would be operated as a concession. The EBRD offered a long term loan as part of the financing schemes. The utility planned to transfer all assets to the SPC.

366 The utility conducted a two stage tender to find a private concessionaire. One of the features of the proposed concession was that the larger part of the concession fee would be paid at the closing of the deal, with the remainder as smaller annual payments.

367 The bid criteria included the duration of the concession, achievement of performance criteria and the scope of a very ambitious investment programme linked to the average annual rate of growth in tariffs.

368 The tender stalled after the pre-qualification stage and drawing up a short list of 5 international water utilities interested in the concession. The interruption of the process is believed to be as a result of elections and changes in the political situation in the County of Constanta.
Main Difficulties
369 This project was believed to be well prepared; the reason for interruption of the process was believed to be of purely political nature. Some of the interviewees voiced the opinion that selection criteria were too stringent and that the overall business model may have been too risky for the private sector, resulting at a very low rate of return.

Main Lessons Learned

Value for Money
370 The VfM analysis was not carried out, as described above, the main criteria of investor selection was the annual growth of tariffs, proposed investment programme and in addition the proposed level of five performance indicators listed below:
- Percentage of households provided with water and wastewater connections;
- Percentage of connections metered;
- Compliance with drinking water and disposed wastewater quality;
- Reduction of water losses; and
- Achievement of mandatory investment expenditure.

371 Rather than scrupulous analysis, the reason for choosing PPP over traditional method was the possibility to obtain additional funding. In addition there was a prevailing conviction in the Romanian public sector, that the level of expertise in existing Romanian utilities did not guarantee the operational and managerial capacity required to achieve the planned standards.

Institutional framework
372 The EBRD prepared the project and commissioned initial analysis from international consultants. The task was facilitated by the fact, that unlike many countries in the region, Romania had a PPP law in place.

373 The tendering process was managed by the water and wastewater utility RAJAC; however the County as the owner of the utility had the ultimate right to make the final decision to select a winning bidder.

Fiscal impact and fiscal governance mechanisms
374 The investors would realise their return on investment from tariffs paid by consumers, hence the concession would not have influence on public budgets.

Specific Issues about Replicability of the Model
375 There seem to be no tangible reasons for the failure of the project. The project was well prepared as the first hybrid PPP in Romania. There were no legal or institutional barriers. The EC granted all the consents for inclusion of the financing with simultaneous transfer of assets to the SPC. There seems to be an underlying issue of timing and political considerations, as the tender announcement was published in the midst of election campaign.

EU regulations
376 There have never existed any specific EU regulations which made the PPP hybrid projects impossible. The project was not prepared as a hybrid PPP; the EU funding was included in the financing structure when the PPP tendering process was well advanced. However all the consents on the part of the EC to include the EU ISPA financing were granted.

377 As already mentioned, the project was stalled and not taken forward due to intangible reasons, such as politics, psychological barriers and general lack of understanding of benefits of PPPs.
Summary

378 The Constanta Water and Wastewater project started off as pure PPP.

379 ISPA funds were added to the scheme when the PPP was well advanced.

380 The procurement process stalled at the stage of creation of a short list, no announcement of annulment has been made.

381 Political reasons are believed to have stalled the project. The local authorities apparently changed their mind about the PPP during the election campaign.
### Poznań Water

| **Description** | The city of Poznan needed to upgrade and extend its water and wastewater network, improve the level of wastewater treatment, also in the context of complying with the EU environmental standards. In order to ensure better management, operation and to facilitate financing, the municipality of Poznan considered a PPP scheme (a concession). The project was commenced in 1996 as a pure PPP. The preparatory work was financed by the EBRD and implemented by a consortium led by Paribas Bank (now BNP Paribas). The concept of including ISPA funding in the scheme appeared in 1999. The municipality and the utility withdrew from continuation of the project in 2002. |
| **Rationale** | Improvement of water and wastewater services, as a part of overall improvement of the Polish environment was one of the major pre-accession requirements in Poland. Poznań Water and Wastewater Utility (now Aquanet) was selected as a good candidate for implementation of one of the initial projects involving development of PPP schemes as a result of the EBRD funded Municipal Public Private Partnership Programme. |
| **Total value** | €104.4 M |
| **Financing (planned)** | Own means Commercial credit Preferential credit from National Fund for Environmental Protection Private investor (€20 M) |
| **incl. EU Funding** | €59.5 M |
| **PPP Scheme** | Concession - the utility was to be divided into two independent companies: an asset holding company and an operating company. The latter was to form a joint venture with a selected private investor to operate a concession. The private operator was to be responsible for financing, investment, renewals, operation, maintenance, billing and revenue collection. |
| **PPP Actors – Winning consortium** | The municipality of Poznan as owner of majority of shares of the utility (the remaining <10% owned by surrounding small municipalities), the utility. The PPP procurement was interrupted, a short list was established, but no winning consortium was selected. |
| **Construction period** | As per the original concept, the implementation of planned investments was 20 years, in reality the programme will be completed within 6 years. |
| **Operation period** | Planned for 25 years. |
| **Rationale for choosing the project as a case study** | 5. There is a general perception that the project was very well structured and prepared. 6. It was the first and only hybrid PPP prepared in Poland, one of the first in a pre-accession country. 7. Reasons for failure: unfavourable political situation, lengthy procedures, timing issues. |
Project history

1991 State-owned regional water utility broken up, PWIK created
1993 Local agreement between communal councils about joint use of PWIK facilities
Jun 1996 PWIK transformed into a municipal entity
1996 PPP project first considered
1997 Letter of Intent with EBRD signed, advisors appointed
Jul 1997 PWIK transformed into a one-person municipally-owned company

Oct 1999 Council authorizes ISPA application
2001 First ISPA application rejected
Jun 2001 Authorization for conditional withdrawal from the PPP process
Sept 2001 ISPA financing granted
2002 PPP investor shortlist prepared
2002 PPP process abandoned

In 1991 the state-owned regional water utility was broken up into 15 state-owned companies. One of these was the Przedsiębiorstwo Wodociągów i Kanalizacji (Poznan Water and Wastewater Utility, PWIK). The utility did not operate only in Poznań, but also served the surrounding 6 communes. In 1993 an agreement formalized this joint use; it also included provisions for the communal councils to take over stakes in PWIK.

In June 1996 PWIK was transformed from a state-owned company into a municipal entity. In the same year, the PPP project was conceived, as part of the EBRD Municipal Public Private Partnership Programme. In 1997 the Poznan city government signed a Letter of Intent with EBRD, and in preparation for the PPP in July 1997 PWIK was transformed into a one-person municipally-owned company. A consortium led by Paribas was appointed as advisors to the project at that time.

The privatisation proceedings continued with delays (often blamed on the advisors). The city council formally authorised the commencement of the PPP process in June 1998. The process proceeded slowly, and in the meantime the utility developed on its own, improving efficiency and investing in infrastructure.

In 1999 the ISPA fund was created, and the concept of including an ISPA grant in the PWIK project appeared, with the city council authorising the application in October 1999. The first application was turned down in 2000, since it made no mention of the PPP process, which was public knowledge. In September 2001 the European Commission signed the ISPA financing memorandum for the PWIK project.

In June 2001 the city council authorised a conditional withdrawal from the PPP proceedings. Even though in 2002 an investor short-list was assembled, the city decided to terminate the PPP process the same year. This did not lead to a loss of the ISPA financing.

In October 2002, the provisions from the 1993 communal agreement were realised, and the six communal councils took over a 36% stake of PWIK. In July 2003 PWIK changed its name to Aquanet.

Background information

In 1996, the EBRD commissioned consultants to verify the scope for PPPs in the environmental and municipal infrastructure. Several potential cases were brought forward; Poznań potential water/wastewater concession met the EBRD criteria and simultaneously, Mr. Kaczmarek, the Mayor of Poznań at that time, saw the concession as the best solution to improve the technical condition of
assets and the level of service in the sector. The mandate letter between the City of Poznań and the EBRD was signed, making it possible to further develop the project. A consortium led by Paribas bank (including also Baker McKenzie and Professor Rudolf and COWI) was selected to perform due diligence, refine the PPP concept, prepare an investment programme, pre-define desirable quality of service and prepare the procurement process.

389 EU grant finance, ever since it became available in Poland, has always been very attractive to the Polish municipalities. Therefore, as soon as it became possible to apply for ISPA funding all large municipalities filed applications. In the case of Poznań the possibility of obtaining EU grant funds became possible while the PPP process was on-going. One of the most important reasons for combining EU funds with the concession was improved bankability and the possibility to implement a more extensive investment programme, while maintaining a similar level of tariffs. Initially, the first application for ISPA money grant was for an upgrade of the wastewater treatment and the water supply system which was submitted by the Municipality to the EC in 2000 did not include any mention of on-going PPP proceedings, due to the belief that PPP was incompatible with ISPA funding. Since the process was public knowledge, the application was rejected and had to be revised to take account of the PPP. The revised application was accepted and both the EC and the Polish government approved hybrid financing.

390 In spite of the official approvals paving the way to integrate EU funds with PPP schemes, allowing improved levels of bankability and affordability, the Municipality of Poznań withdrew from the initial commitment and abandoned the concept of PPP. The Municipality, for obvious reasons, did not withdraw application for ISPA, the EC accepted the changed background conditions and in September 2001, the European Commission signed the Financing Memorandum granting €59.5 M for the project entitled “Wastewater Treatment and Water Supply for the Municipality of Poznan”.

**Planned Poznań Water & Waste-water Concession Structure**
PPP Features

391 The PPP structure was developed by two consortia of consultants commissioned by the EBRD. The initial concept developed by Booz Allen Hamilton provided for a division of the Poznan water and wastewater company into an asset holding company and an operating company. The operating company was expected to enter into a joint venture agreement with a private investor selected via competitive bidding to operate a concession for water and wastewater services. Paribas bank did not change the originally proposed PPP structure, maintaining the separation between asset ownership and operation (concession). The duration of the concession was planned for 25 years. Since in Poland currently there is no water regulating body, the role of a regulator is performed by a municipality (approval of tariffs and standards of service).

392 Since the PPP process was interrupted after the initial prequalification only the draft tendering documentation was prepared, including the contract term sheet. However, as all PPP actors mutually agreed, one of the main selection criteria would be an amount of investment declared by a potential investor within a set tariff ceiling (this ceiling was defined as a result of an affordability study conducted as a part of the ISPA application and was accepted both by the City and the EC).

393 Similarly, no detailed allocation of risk, with the exception of legal risk, was prepared.

Main Difficulties

394 The main difficulty hindering and finally interrupting the PPP process seemed to be prolonged decision making in the City. This was aggravated by the fact that the concept of hybrid PPPs was new in pre-accession countries and also involved lengthy multiple bureaucratic procedures and agreements (as discussed below).

395 The tender for PPP was announced one month prior to the approaching municipal elections. In addition there was a change of management in the water and wastewater utility. The new management seemed to have more influence over the City and was more successful opposing the PPP to retain control over the company. Additionally, during this period, there was general public resistance to privatisations in strategic municipal sectors (most of Polish citizens even now do not differentiate between PPP and privatisation), especially water. These were among the main reasons for Poznan withdrawing from the process.

Main Lessons Learned

Value for Money

396 No Value for Money analysis was carried out – it was planned to be implemented based on bids submitted. Similarly, a Public Sector Comparator was never calculated. The consultant has heard opinions from various sources, that should the detailed analysis have been carried out prior to the tendering process, it would have helped to defend the PPP case and would have led to a successful award of the concession.

Institutional framework

397 The preparation of the project was funded by the EBRD within the scope of the technical assistance project entitled Municipal Public Private Partnership Programme. The tendering documents were being developed by the consortium led by Paribas bank – the consultants selected by the EBRD. The prequalification was made predominantly by representatives of the Municipality and the utility.

398 The project both from the PPP perspective as well as the hybrid PPP perspective turned out to be a failure. It has, however, brought numerous tangible benefits to the City and the utility, including the development of long term investment plans, the setting up of standards of service and the improvement of management and operations of the utility.

399 The PPP Law in Poland has just been passed by the Parliament and will not come into force until October 9th 2005. Prior to this PPP legislation did not exist in Poland and the project commenced and was implemented when this was the case. Lack of this legislation was a barrier to implementation of PPP schemes financed out of the public budget (long term contracts involving commitments from the
Public budgets were not feasible from the legal point of view for periods greater than 3 years. Schemes funded by user charges were possible according to the Public Procurement Law.

In the case of the planned Poznań concession, a Municipal Council resolution was required and subsequently two such resolutions were passed. One approved commencement of the PPP process, (passed in June 1998) and the second was to close and withdraw from the process passed (conditionally) in June 2001. Similarly, submission of the ISPA application required approval of the City council. This was granted in a form of a resolution in October 1999.

**Fiscal impact and fiscal governance mechanisms**

The investors would realise their return on investment from tariffs paid by consumers, hence the concession would have no influence on public budgets.

**Specific Issues about Replicability of the Model**

The planned concession for operation of water and wastewater services was to be the first hybrid PPP in Poland. In fact, there have been no further attempts to realise a project involving EU funds and PPP ever since.

The concept for the entire scheme and the methods for its implementation had to be agreed between the EC/EBRD and the City and the process was very long and tedious. The fact that both the EC and the Polish government finally agreed to combine the PPP concession with ISPA was a great success.

The institutional framework existing in the City was not conducive to the development of the PPP. The utility management was directly involved in structuring the PPP scheme, which posed a distinct conflict of interest. A much better approach would be setting up a PPP task force within the municipal government, with the utility’s role limited to the supply of information.

The most important reason for the failure of the scheme was the fact that the concept of PPP was completely new and incomprehensible to most of the public officials and to the public at the time and being commonly mistaken for privatisation. The political climate was very negative towards privatisation of sensitive municipal services, especially water. The law was not in place, the regulatory solutions in place were risky to the private sector (the municipality that would be signing the concession contract, was the owner of the utility – a shareholder in the company and at the same time would approve tariffs). The preparatory works were extremely prolonged and overlapped with municipal elections.

Basically, the model developed for the Poznań utility seems to be replicable to other utilities/municipalities in a more favourable regulatory and political environment. The fact that the political considerations took priority in this case, should not be interpreted as a failure of the hybrid PPP model.

**EU regulations**

No specific EU regulations which make the PPP hybrid projects impossible exist. There have always existed a number of obstacles or areas of concern which needed to be approached from the contractual point of view.

The amount of EU funding was limited to 59% of the total value of project (instead of the customary 75%) due to the expected contribution of the private sector. Even though the city applied for an increase of EU financing to 75% (after they withdrew from the concession) the EC did not agree.

As indicated above, the project was very well structured. The only obstacles which appeared were of a political nature, in a broad sense. It is extremely hard to judge whether the project would have been more successful had the EU funding been introduced at a different stage of the project.
Summary

410 The Poznań Water and Wastewater project started off as a pure PPP, intended as such in anticipation of increasing operational efficiencies and managerial know-how, in addition to the provision of private capital to carry out the investment programme;

411 The concept for adding ISPA funding was developed when the work on development of PPP procedure was well advanced, becoming the first and only hybrid PPP project in Poland;

412 All the due approvals on part of the EC needed to combine the ISPA grant with the PPP scheme were granted; and

413 The project was believed to be extremely well prepared; however failed due to political considerations.
# Appendices

## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession Countries</td>
<td>The 10 New Member States prior to their accession on 1 May 2004. After 1 May 2004 for the purposes of this Report this term refers only to the acceding countries, Bulgaria and Romania, and in a longer perspective the candidate country, Turkey.</td>
</tr>
<tr>
<td>Additionality</td>
<td>The EU principle which states that Structural and Cohesion Funds spending should not replace, but be additional to public or other national expenditure.</td>
</tr>
<tr>
<td>Bankability</td>
<td>The ability of a project to generate sufficient cashflows, bearing in mind the risks associated with the project, to repay its financing.</td>
</tr>
<tr>
<td>BOOT</td>
<td>BOOT - Build Own Operate and Transfer is a form of PPP contract, similar to a BOT. The difference is that the infrastructure is owned by the private sector for the concession contract period (ownership is transferred at the concession hand over / reversion).</td>
</tr>
<tr>
<td>BOT</td>
<td>BOT - Build Operate Transfer. The private sector finances, builds and operates a new infrastructure facility or system according to Government performance standards. The operations period is long enough to allow the private company to pay off the construction costs and realise a return on investment. The public sector retains ownership of the infrastructure throughout its life (both the concession period and beyond) and becomes both the customer and the regulator of the service.</td>
</tr>
<tr>
<td>Clawback</td>
<td>The required repayment of granted and transferred funds upon infringement of the financing contract. This can happen during the realisation of the project before any or all funds are spent, in which case the EC withdraws its guarantee of grant financing for the project.</td>
</tr>
<tr>
<td>Cohesion Countries</td>
<td>Member States to whom Cohesion Funds are available, i.e. those with a GDP per capita lower than 90% of the EU average.</td>
</tr>
<tr>
<td>Cohesion Funds</td>
<td>European Union funds with the general objective of enabling the Member States with poorer infrastructure to catch up in economic terms in the fields of transport and the environment without damaging their integration into the Economic and Monetary Union (EMU), subject to the Council Regulation No 1164/94 of May 16 1994.</td>
</tr>
<tr>
<td>Concession agreement/contract</td>
<td>An agreement or contract made between a host government and a project company or sponsor to permit the construction, development, and operation of a particular project, through which the government is delegating its monopoly or other unique rights.</td>
</tr>
<tr>
<td><strong>Concession hand-over / reversion</strong></td>
<td>After the concession period, the concession company hands over all the facilities and equipments to the government investor without any additional payments</td>
</tr>
<tr>
<td><strong>Concession period</strong></td>
<td>The duration over which the private sector will operate the service/asset. The asset is handed back to the government authority in a pre-agreed condition at the concession handover/reversion date</td>
</tr>
<tr>
<td><strong>Consortium</strong></td>
<td>A group of companies wishing to act jointly as sponsors to a project</td>
</tr>
<tr>
<td><strong>Construction cost</strong></td>
<td>Any of the cost types (appropriations, commitment, expenditure or estimate to complete) associated with the scope of the construction work</td>
</tr>
<tr>
<td><strong>Construction risk</strong></td>
<td>Risk associated with the physical construction phase of project development</td>
</tr>
<tr>
<td><strong>Currency risk</strong></td>
<td>The cross-currency and foreign exchange availability risks.</td>
</tr>
<tr>
<td><strong>Cost-Benefit-Analysis (CBA)</strong></td>
<td>The systematic inclusion of indirect, widespread, and non-monetary costs and benefits in investment appraisal, usually employed to justify public transport infrastructure investment by the state</td>
</tr>
<tr>
<td><strong>DBFO</strong></td>
<td>Design Build Finance and Operate, a common form of PPP structuring. The responsibilities for designing, building, financing and operating are bundled together and transferred to private sector partners while the infrastructure ownership remains with the public sector</td>
</tr>
<tr>
<td><strong>DG REGIO</strong></td>
<td>The directorate at the European Commission responsible for European measures to assist the economic and social development of the less-favoured regions of the European Union. It is in charge of the administration of three major EU funds: ERDF, Cohesion Fund and ISPA</td>
</tr>
<tr>
<td><strong>DG TREN</strong></td>
<td>The directorate at the European Commission responsible for regional policy on transport and energy</td>
</tr>
<tr>
<td><strong>EBRD</strong></td>
<td>The European Bank for Reconstruction and Development</td>
</tr>
<tr>
<td><strong>EIB</strong></td>
<td>European Investment Bank</td>
</tr>
<tr>
<td><strong>EIF</strong></td>
<td>European Investment Fund, the EU specialised vehicle for venture capital and guarantees</td>
</tr>
<tr>
<td><strong>Eligible cost</strong></td>
<td>The portion of the project cost that is eligible under EU regulations and can be partially funded from EU funds. This is the cost from which the EU funding percentage is calculated</td>
</tr>
<tr>
<td><strong>EMU</strong></td>
<td>The European Monetary Union, reflected in participation in the single European currency, the Euro, and a common monetary policy. Three of the EU15 are not in the Euro zone, namely the UK, Denmark, and Sweden</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
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<tr>
<td><strong>EPC contract</strong></td>
<td>An “Engineer, Procure, and Construct” contract that requires the contractor to take responsibility for the entire scope of the construction of the specified infrastructure, usually, but not necessarily, in the form of a Lump Sum/Turn-Key contract.</td>
</tr>
<tr>
<td><strong>ERDF</strong></td>
<td>The European Regional Development Fund is one of the EU structural funds. Its principal objective is to promote economic and social cohesion within the European Union through the reduction of imbalances between regions or social groups. Its resources are mainly used to co-finance: productive investment leading to the creation or maintenance of jobs, infrastructure and local development initiatives and the business activities of small and medium-sized enterprises. Subject to the Council Regulation No 1260/1999</td>
</tr>
<tr>
<td><strong>ESA-95</strong></td>
<td>European System of National Accounts, 1995 version. A set of regulations issued by EUROSTAT defining the concept of national budgets. It affects PPPs as it defines when debt is treated as on-balance sheet or off-balance sheet</td>
</tr>
<tr>
<td><strong>European Commission (EC)</strong></td>
<td>The politically independent institution that represents and upholds the interests of the European Union as a whole. It proposes legislation, policies and programmes of action and it is responsible for implementing the decisions of Parliament and the Council</td>
</tr>
<tr>
<td><strong>European Monetary Union (EMU)</strong></td>
<td>An agreement by participating European Union member countries that includes protocols for the pooling of currency reserves and the use of a common currency, the euro</td>
</tr>
<tr>
<td><strong>European Union (EU)</strong></td>
<td>The 25 Member States (EU-15 + NMS) as at the date of writing this Report. The term may be used interchangeable with EU-15 for years where there were only 15 Member States</td>
</tr>
<tr>
<td><strong>EU funds</strong></td>
<td>Structural Funds, Cohesion Funds, ISPA and TEN-T funds</td>
</tr>
<tr>
<td><strong>EU-15</strong></td>
<td>The EU Member States as of April 30, 2004, prior to the accession of the New Member States. These are: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom</td>
</tr>
<tr>
<td><strong>Financial close</strong></td>
<td>The finalization of all arrangements and contracts pertaining to the external financing of a project</td>
</tr>
<tr>
<td><strong>Financing agreement/contract</strong></td>
<td>The documents which provide the project financing and sponsor support for the project as defined by the project contracts</td>
</tr>
<tr>
<td><strong>Financing gap</strong></td>
<td>The difference between the construction cost of a project and the funding of the project based on user charges alone, if not defined otherwise</td>
</tr>
<tr>
<td><strong>Financing risk</strong></td>
<td>The risk of not being able to obtain the necessary funding of a project from the banking and capital markets. Whilst this is formally a risk for the project sponsors, it is also a major risk for the host government in delivering the project, and explains why financial close is such a major milestone</td>
</tr>
</tbody>
</table>
### GDP
Gross Domestic Product

### Green Paper
The Green Paper on PPPs published on 30 April 2004 presents the opinion of the European Economic and Social Committee on its approach to PPPs

### Hybrid PPP
A PPP that involves the use of EU structural funds, either directly or indirectly via the host government

### IFI
International Financing Institutions, a generic term that includes both commercial banks and international organizations such as the IMF (International Monetary Fund) who provide credit internationally

### Infrastructure gap
The difference between existing infrastructure and the infrastructure needed to promote economic development of a region

### ISPA
The Instrument for Structural Policies for Pre-Accession Fund, one of the three financial instruments (with Phare and Sapard) to assist the candidate countries in the preparation for accession. Based on the principles that govern the Cohesion Fund, it provides assistance for infrastructure projects in the EU priority fields of environment and transport. Subject to the Council Regulation No 1267/1999 of 21 June 1999

### Lump sum/Turn-Key contract (LSTK)
An EPC contract that provides for the complete engineering, procurement, construction, and start-up of a facility by a certain date, for a fixed price and at guaranteed performance levels

### Maastricht Convergence Criteria
A set of measures of readiness of countries for joining the EMU and thus for the adoption of the single currency, the euro. They are defined in the Treaty on European Union of 1992, known as the Maastricht Treaty

### Net Present Value
The result of applying discounted cash flow techniques to a series of future cashflows

### New Member States (NMS)
The 10 new member countries which joined the EU on 1 May 2004 – Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia

### N+2 rule
An EU funding rule which requires that implementation of a project must commence within two years after the EU financing decision

### Operation period
The time period during which the concessionaire provides the services/operates the asset the PPP contract covers (access to the road, handling of airport operations, provision of water or waste services). Construction may take place during the operation period (e.g. a section of a road is open and operated by the concessionaire while works on the rest of the road continue)

### Operational risk
The risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events during the operational phase of a project
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFI</td>
<td>The original acronym used to describe PPPs in the UK, sometimes used to mean a subset of PPPs based primarily on availability payments</td>
</tr>
<tr>
<td>Political Risk</td>
<td>The general term used to describe risks arising from factors that are determined or influenced by governments. External risks, such as currency fluctuations, currency convertibility, war, sanctions, etc may be avoided, hedged, or insured against, and are significantly mitigated by membership of the EU and EMU. Internal risks, such as taxation, terrorism, inflation, and strikes, are usually unavoidable and uninsurable, and particularly affect PPPs</td>
</tr>
<tr>
<td>PPP</td>
<td>Long-term contracts between governments and the private sector under which the private sector provides specified services to specified performance standards against which they are measured and which determines their income under the contract. They usually involve significant expenditure on the physical assets necessary to deliver the service, and may well involve the private sector in charging users of the service directly</td>
</tr>
<tr>
<td>Private funding</td>
<td>Finance provided by a private party</td>
</tr>
<tr>
<td>Private party</td>
<td>An individual or organization not employed, owned, or operated by the local/municipal, regional or state government</td>
</tr>
<tr>
<td>Private sector</td>
<td>The economic entities which are not controlled by the state - i.e., a variety of entities such as private firms and companies, corporations, private banks, non-governmental organizations, etc.</td>
</tr>
<tr>
<td>Project cost</td>
<td>For the purpose of this Report, the cost of developing a project (both during construction and operation periods). It includes 1) The cost of all design work of the project (if awarded to the concessionaire), 2) The cost of the construction of the infrastructure, 3) The cost of the provision of services/operation of the assets</td>
</tr>
<tr>
<td>Project structuring/structure</td>
<td>The establishment of corporate entities, usually involving SPVs, the identification of key suppliers and sub-contractors, the negotiation of sub-contracts, the allocation of risks, and the design of financing arrangements</td>
</tr>
<tr>
<td>Public Contribution</td>
<td>The level of funding committed from the public sector to a project. For the purpose of this Report, the term includes the sum of national government and EU funding</td>
</tr>
<tr>
<td>Public Guarantee (or sovereign guarantee)</td>
<td>A government commitment of funds/actions under certain conditions, based on project documents</td>
</tr>
<tr>
<td>Public funding / Public contribution</td>
<td>Finance provided by the public sector</td>
</tr>
<tr>
<td>Public sector</td>
<td>The part of economic and administrative life that deals with the delivery of goods and services by and for the government, whether EU national, regional or local/municipal</td>
</tr>
<tr>
<td><strong>Public Sector Comparator (PSC)</strong></td>
<td>The risk-adjusted, estimated full lifecycle cost of a project if it was carried out by conventional in-house means. It is expressed in terms of net present value</td>
</tr>
<tr>
<td><strong>Return on equity</strong></td>
<td>Earnings before extraordinary items, less preferred-share dividends, divided by average common shareholders’ equity; the rate of return on the investment for the company's common shareholders, the only providers of capital who do not have a fixed return</td>
</tr>
<tr>
<td><strong>Revenue-generating (RG) projects</strong></td>
<td>A project involving an infrastructure, the use of which involves fees borne directly by users and any operation resulting from the sale or rent of land or buildings</td>
</tr>
<tr>
<td><strong>Risk</strong></td>
<td>An event which can change the expected cash flow forecast for a project</td>
</tr>
<tr>
<td><strong>Syndication</strong></td>
<td>The process of inviting other banks to participate in a financing by the underwriters of the financing</td>
</tr>
<tr>
<td><strong>SOE</strong></td>
<td>State Owned Enterprise</td>
</tr>
<tr>
<td><strong>Sovereign risk</strong></td>
<td>The risk that a government will be unable to meet its external commitments. By definition, all governments are able to meet their obligations expressed in their own currency, so government bonds issued in their own currency are deemed to be risk-free for economic actors in that currency. Membership of the Euro zone therefore involves a degree of moral hazard that is meant to be regulated by the Maastricht criteria</td>
</tr>
<tr>
<td><strong>Special Purpose Company / Special Purpose Vehicle (SPV)</strong></td>
<td>A special purpose joint venture project company established by the sponsors which has as its sole purpose the delivery of a specific project</td>
</tr>
<tr>
<td><strong>Sponsor</strong></td>
<td>A party wishing to develop and finance (with own equity or subordinated debt and other project finance) a project. Shareholders of project companies are known as sponsors</td>
</tr>
<tr>
<td><strong>Step-in rights</strong></td>
<td>Rights relevant to both the private and the public sector. An entitlement to perform or allow a third party to perform the SPV’s obligations under the concession contract in certain circumstances</td>
</tr>
<tr>
<td><strong>Structural Funds</strong></td>
<td>The European Union funds assigned to address the structural problems of economic regeneration of the regions and industries of the EU. They are allocated to areas according to a number of agreed objectives, defined in terms of unemployment, backwardness, declining industries, sparseness of population, and similar factors. Subject to the Council Regulation No 1260/1999</td>
</tr>
<tr>
<td><strong>Traditional Procurement</strong></td>
<td>Procuring infrastructural projects through a tender that encompasses only the construction of the relevant facilities</td>
</tr>
<tr>
<td><strong>Traffic Risk</strong></td>
<td>A risk relevant to transport infrastructure projects, namely the chance that the number of users of the infrastructure will not be as high as initial projections</td>
</tr>
<tr>
<td><strong>Trans-European Transport Networks (TEN-T)</strong></td>
<td>A European Union designation for roads, railways, inland waterways, airports, seaports, inland ports and traffic management systems which serve the entire continent, carry the bulk of the long distance traffic and bring the geographical and economic areas of the Union closer together. Subject to the Council Regulation (EC) No 2236/95 of 18 September 1995</td>
</tr>
<tr>
<td><strong>Underwriting of financing</strong></td>
<td>The commitment by a group of banks to provide the entire agreed financing, subject to certain restricted conditions</td>
</tr>
<tr>
<td><strong>Underwriting of risks</strong></td>
<td>Formal agreement to take on a certain risk and reimburse the other party in the case of negative consequences ensuing from that risk</td>
</tr>
<tr>
<td><strong>Value for Money (VfM)</strong></td>
<td>A concept associated with the economy, effectiveness and efficiency of a service, product or process, i.e. a comparison of the input costs against the value of the outputs and a qualitative and quantitative judgment of the manner in which the resources involved have been utilised and managed</td>
</tr>
<tr>
<td><strong>Whole life costs</strong></td>
<td>The full costs of a project including those incurred during the design, construction, operation and maintenance of the facility</td>
</tr>
<tr>
<td><strong>Windfall gains</strong></td>
<td>Unexpected or excessive additional income from user charges or changes in taxes or government regulations etc</td>
</tr>
</tbody>
</table>
II Case studies

Initial List of identified and proposed hybrid projects

At the initial stage of our work we have identified the following transport and municipal infrastructure projects that have been carried out under the structures involving both the public and private sectors, and including the EU grants in the form of Cohesion, Structural and ISPA funds.

<table>
<thead>
<tr>
<th>No</th>
<th>Country</th>
<th>Project Name</th>
<th>Year</th>
<th>Sector</th>
<th>Project Value € M</th>
<th>Type of Grant</th>
<th>Grant € M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Czech Republic</td>
<td>Karvina Sewerage</td>
<td>2000</td>
<td>Environment</td>
<td>20</td>
<td>ISPA</td>
<td>12</td>
</tr>
<tr>
<td>2.</td>
<td>Germany</td>
<td>Local Airport Kassel-Calden</td>
<td>1991-2003</td>
<td>Transport</td>
<td>7</td>
<td>ERDF</td>
<td>0.3</td>
</tr>
<tr>
<td>3.</td>
<td>Great Britain - Cornwall</td>
<td>Actnow</td>
<td>2002-2005</td>
<td>Telecommunication</td>
<td>20</td>
<td>ERDF</td>
<td>8</td>
</tr>
<tr>
<td>4.</td>
<td>Great Britain</td>
<td>Salford Quays Manchester (including Metrolink extension)</td>
<td>1997-2000</td>
<td>Transport</td>
<td>189</td>
<td>ERDF</td>
<td>16</td>
</tr>
<tr>
<td>5.</td>
<td>Great Britain – Scotland</td>
<td>West Lothian College</td>
<td>1999-2001</td>
<td>Education</td>
<td>27</td>
<td>ERDF</td>
<td>2</td>
</tr>
<tr>
<td>6.</td>
<td>Great Britain - Scotland</td>
<td>Stirling Further Education Centre</td>
<td>1996-</td>
<td>Education</td>
<td>6</td>
<td>ERDF</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Greece</td>
<td>Athens International Airport</td>
<td>1976-2001</td>
<td>Transport</td>
<td>2,000</td>
<td>Cohesion Fund</td>
<td>250</td>
</tr>
<tr>
<td>10.</td>
<td>Ireland</td>
<td>Luas Light Rail in Dublin</td>
<td>2000-2006</td>
<td>Transport</td>
<td>1,000</td>
<td>ERDF</td>
<td>150</td>
</tr>
<tr>
<td>11.</td>
<td>Ireland</td>
<td>Limerick main drainage (stage III)</td>
<td>1999-2004</td>
<td>Environment</td>
<td></td>
<td>Cohesion Fund</td>
<td>76</td>
</tr>
<tr>
<td>12.</td>
<td>Ireland</td>
<td>Cork main drainage (stage III)</td>
<td>2000-2004</td>
<td>Environment</td>
<td>74</td>
<td>Cohesion Fund</td>
<td>45</td>
</tr>
<tr>
<td>13.</td>
<td>Ireland</td>
<td>Dublin region waste water treatment</td>
<td>1999-2003</td>
<td>Environment</td>
<td>184</td>
<td>Cohesion Fund</td>
<td>133</td>
</tr>
<tr>
<td>No</td>
<td>Country</td>
<td>Project Name</td>
<td>Year</td>
<td>Sector</td>
<td>Project Value € M</td>
<td>Type of Grant</td>
<td>Grant € M</td>
</tr>
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</tr>
<tr>
<td>15.</td>
<td>Ireland</td>
<td>M1 Drogheda by-pass</td>
<td>1999-2003</td>
<td>Transport</td>
<td>254</td>
<td>Cohesion Fund</td>
<td>52</td>
</tr>
<tr>
<td>17.</td>
<td>Portugal</td>
<td>North Concession</td>
<td>1997-1999</td>
<td>Transport</td>
<td>1,000</td>
<td></td>
<td>170</td>
</tr>
<tr>
<td>19.</td>
<td>Poland</td>
<td>N19 road</td>
<td>Planned for 2007 onward</td>
<td>Transport</td>
<td>152</td>
<td>ERDF</td>
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<td>20.</td>
<td>Romania</td>
<td>Constanta Water and Wastewater Project</td>
<td>2002-ongoing</td>
<td>Water and Wastewater</td>
<td>190–220</td>
<td>ISPA and PHARE</td>
<td>72 from ISPA; 0.6 from PHARE</td>
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<tr>
<td>22.</td>
<td>Spain and France</td>
<td>Perpignan – Figueras Rail Concession</td>
<td>2004-2009</td>
<td>Transportation</td>
<td>1,000</td>
<td>TEN-T Funds</td>
<td>55</td>
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</table>
### List of individuals interviewed

#### The initial stage of the assignment

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/company</th>
<th>Country</th>
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</thead>
<tbody>
<tr>
<td>Richard Abadie</td>
<td>Partner - PwC</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Paul Brewer</td>
<td>Partner - PwC</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Francisca Cordovil</td>
<td>Cohesion Fund Coordinator</td>
<td>Portugal</td>
</tr>
<tr>
<td>Filip Drapak</td>
<td>Head of PPP Centrum</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>Mark Graham</td>
<td>Assistant Director – PwC</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Phil Holt</td>
<td>Director - PwC</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Adrian Howcroft</td>
<td>Assistant Director - PwC</td>
<td>Central and Eastern Europe</td>
</tr>
<tr>
<td>Shane Lyons</td>
<td>Director - PwC</td>
<td>Ireland</td>
</tr>
<tr>
<td>Tamas Janeba</td>
<td>PPP Centrum</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>Glen Massey</td>
<td>Partner - PwC</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Guillermo Masso</td>
<td>Partner - PwC</td>
<td>Spain</td>
</tr>
<tr>
<td>Ray Mills</td>
<td>Partner - PwC</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Gerry Muscat*</td>
<td>Senior Banker - EBRD</td>
<td>Poland</td>
</tr>
<tr>
<td>Nicholas Peyiotis</td>
<td>Senior Manager - PwC</td>
<td>Greece</td>
</tr>
<tr>
<td>Joao Pontes Amaro</td>
<td>Deputy Director - Ministry of Infrastructure</td>
<td>Portugal</td>
</tr>
<tr>
<td>Krzysztof Siwek</td>
<td>Senior Manager - PwC</td>
<td>Poland</td>
</tr>
<tr>
<td>Aidan Walsh</td>
<td>Partner - PwC</td>
<td>Ireland</td>
</tr>
<tr>
<td>Nathan Weatherstone</td>
<td>Manager - PwC</td>
<td>United Kingdom</td>
</tr>
</tbody>
</table>
## The final stage of the assignment

<table>
<thead>
<tr>
<th>Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Alain Baron</td>
<td>European Commission</td>
<td>Belgium</td>
</tr>
<tr>
<td>Niki Dandolou</td>
<td>Advisor to the Secretary General for Investments &amp; Development Ministry of Economy and Finance</td>
<td>Greece</td>
</tr>
<tr>
<td>Gavilanes Gineres Gerardo*</td>
<td>Director of the Division for Economic Consultancy, the Spanish Infrastructure Ministry</td>
<td>Spain</td>
</tr>
<tr>
<td>Pedro López González</td>
<td>Financial Director - TP Ferro</td>
<td>Spain</td>
</tr>
<tr>
<td>Demetrios Konstantakopoulos</td>
<td>Deputy Director - National Bank of Greece</td>
<td>Greece</td>
</tr>
<tr>
<td>George Koumis</td>
<td>Associate Investment Banking - National Bank of Greece</td>
<td>Greece</td>
</tr>
<tr>
<td>Emmanouil Maroulakis</td>
<td>Deputy Head of Division Greek Desk European Investment Bank</td>
<td>Luxembourg</td>
</tr>
<tr>
<td>Vivian Nicoli</td>
<td>Senior Banker - EBRD</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Manos Petoussis</td>
<td>Chief Financial Officer - Attiki Odos SA</td>
<td>Greece</td>
</tr>
<tr>
<td>Katarzyna Świergosz</td>
<td>Director – Aqua-Net</td>
<td>Poland</td>
</tr>
<tr>
<td>Thomas Vieillescazes</td>
<td>Head of the Rail Infrastructure and Financing Unit - French Ministry of Infrastructure &amp; Transports</td>
<td>France</td>
</tr>
<tr>
<td>John Walsh</td>
<td>European Commission</td>
<td>Belgium</td>
</tr>
<tr>
<td>Arnaud Zimmermann</td>
<td>the French Transport Ministry</td>
<td>France</td>
</tr>
</tbody>
</table>
IV List of information sources and documents used

EU documents

   OJ L 161/1 26.06.1999

   OJ L 213/1 13.08.1999

   OJ L 130 25.05.1994

   OJ L 2/7 7.01.2003

   OJ L 161/57 26.06.1999

   OJ L 161/62 26.06.1999

   OJ L 2/7 7.01.2003


9. Proposal for a Council Regulation laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund
   SEC (2004)924

10. Treaty of Rome (Treaty establishing the European Community – amended by subsequent treaties)

11. “Guide to cost-benefit analysis of investment projects”


Polish documents:
1 Integrated Regional Development Operational Programme (IRDOP)
   DZ. U. NR 166 POZ. 1745
2 Operational Programme Transport (OPT)
   DZ. U. NR 177 POZ. 1822
3 Integrated Regional Development Operational Programme - Programme Complement (IRDOP)
   DZ. U. NR 200 POZ. 2051
4 Operational Programme Transport – Programme Complement (OPT).
   DZ. U. NR 235 POZ. 2350
   www.funduszspojnosci.gov.pl
6 The Strategy of implementation of Cohesion Fund 2004-2006
   DZ. U. NR 176 POZ. 1827

Other documents:
1 Concession agreement for the Athens International Airport: “Airport Development Agreement”
   dated 31 July 1995
2 Concession agreement for Perpignan-Figueras rail link: “CONTRATO DE CONCESION DEL
   PROYECTO, CONSTRUCCION, MANTENIMIENTO Y EXPLOTACION DE LA SECCION
   INTERNACIONAL ENTRE FIGUERES Y PERPIÑAN DE UNA NUEVA LINEA FERROVIARIA DE
   ALTA VELOCIDAD”
3 Dundalk Preliminary Information Memorandum

Publications:
1 “IN progress” published by NDP/CSF Information Office
2 Project Finance International
3 Engineering News-Record
4 Design-Build
5 infranews
6 Athens News
7 Airports International
8 Rzeczpospolita
9 Puls Biznesu

Websites:
1 Website of the European Commission
   http://europa.eu.int/comm/
2 Website of the National Roads Authority
   http://www.nra.ie/
3 Website of EBRD
   http://www.ebrd.com/
4 Website of EIB
   http://www.eib.org/
5 Czech Ministry for Regional Development, EU Structural Funds site
   www.strukturalni-fondy.cz

Other sources:
1 ProjectWare database product
V Questionnaires used for interviews

Public Sector

Transaction brief
1 Are there any comments you would like to make on the transaction brief submitted?

Institutional Framework
2 How did this project fit into the overall strategic plans for developing infrastructure?
3 Which institution was responsible for analyzing and preparing the project? Which institution was responsible for awarding and management of the tendering process?
4 Which institution specifically focussed on the PPP angle? At what stages of the process?
5 Which external advisors were hired? What was their role, particularly vis-à-vis EU?
6 Was any specific legislation issued to enable implementation of the project?
7 Who signed the PPP contract? Did it require further parliamentary approval?
8 Were there any other parties who significantly influenced the process?

Fiscal impact
9 Are public subsidies refundable or non-refundable? Under what conditions?
10 What traffic/demand guarantees were offered?
11 What was the sharing of risks between the public/private sectors?
12 What other incentives (if any) were offered to the public sector?

EU funding
13 What was the main rationale for EU funding?
14 Was EU funding considered from the very beginning of the project? At what stage of the process was the EU Commission involved and how?
15 What types of funds were requested? Which institution approved the application? Who prepared the application?
16 What changes (if any) were made in order to fulfil EU regulations governing EU grants?
17 At what stage of the process was the XXXX (EIB or EBRD, as applicable) involved?

Management of the project
18 How was competition managed? Were there any complaints?
19 Who was responsible for project management? Was there any institution established specifically to manage, monitor and audit the project during construction and operation?
20 What responsibilities were awarded to the institution auditing and controlling the project?

Lessons learned
21 What problems arose from the EU funding/hybrid nature of the project?
22 What factors were essential for this project to be successful? What would you change?
23 What were the key issues/challenges you faced in implementing the project?
European Union

Transaction brief
1. Are there any comments you would like to make on the transaction brief submitted?

Project Formation
2. Was the project appropriately developed at the time it was put forward for EU funding?
3. Would it have been better if the EU had been involved earlier or later?
4. Was the project sponsor properly advised?
5. Would more advice have helped or hindered the discussions with the project sponsor?

Competition
6. Did you have to lay down any requirements regarding competition?
7. Did the rules give sufficient flexibility for choosing a private partner?
8. Was the EU or host government contribution made the subject of the competition?
9. Is there a preference for determining the EU contribution before or after a competition?
10. Was there a State Aid issue regarding the project, and how was it resolved?

EU contribution
11. What calculation method was used to justify the requested level of contribution?
12. Was it appropriate? Did it limit the amount of the EU contribution?
13. Was the contribution amount negotiated during project formation? Using what criteria?
14. Was the contribution amount reduced during project implementation? For what reason?
15. Did the host government act as a conduit, or was the EU contribution advanced directly?

PPP aspects
16. Did you express a preference for the use of the PPP model for implementation?
17. Did the host government initially propose a PPP, or was this a later development?
18. Did the EU contribution influence the formation and structure of the PPP?

EU policies
19. Was the need for the Project to observe EU policies a problem for the PPP?

Lessons learned:
20. What problems arose from the co-financing nature of the project?
21. What factors were essential for this project to be successful? What would you change?
22. What were the key issues/challenges you faced in implementing the project?
Financiers - EIB

Transaction brief
1. Are there any comments you would like to make on the transaction brief submitted?

EIB-related issues
2. Did the co-financing nature of the project influence EIB’s involvement?
3. Was EIF funding involved? If not, was it approached? Would the project have qualified?
4. Did EIB accept construction risk, or was it guaranteed by the project financing banks?
5. Did the EC consult with EIB regarding the project?
6. When was EIB brought into the project?

Lessons learned:
7. What problems arose from the co-financing nature of the project?
8. What factors were essential for this project to be successful?

Financiers - EBRD

Transaction brief
1. Are there any comments you would like to make on the transaction brief submitted?

EBRD-related issues
2. Was EBRD involved in project formation at an early stage?
3. Did EBRD see itself as helping to promote the project?
4. Did ISPA funding influence EBRD’s funding?
5. Did the host government facilitate the use of ISPA funding?

Lessons learned:
6. What problems arose from the co-financing nature of the project?
7. What factors were essential for this project to be successful?
Private Sector Perspective

Transaction brief

1. Are there any comments you would like to make on the transaction brief submitted?

Risk allocation

2. What risks were allocated to the private side?
3. What risks were allocated to the sponsor?
4. What risks were allocated to the financial institutions involved?
5. Does the allocation change once construction is finished?
6. What guarantees were requested from the public sector?

Tendering process

7. Were there any problems with the tendering process?
8. Were there problems arising from the deal structure?
9. Did the public sector have enough specialist advice?

Financing process

10. How long did it take to reach financial close?
11. Was there any change made to the PPP contract as a result of the financiers’ requirements?
12. Is refundability of grants an issue, especially for the financing?
13. Were [EIB/EBRD] involved? Was their involvement beneficial?
14. Is any restructuring envisaged once the project risk level decreases (i.e. after construction finishes and reliable operation ratios are obtained)?

Management of the project

15. Are the reporting and drawdown requirements onerous or problematic?
16. Does the public sector manage the EU aspects?

Lessons learned

17. What problems arose from the EU funding/hybrid nature of the project?
18. What factors were essential for this project to be successful? What should be changed?
19. To what extent, was the success of the project due to XXXX’s (name of the country) characteristics? Could the success factors be applied to different countries?
VI EU rules for the next programming period under preparation

The EU is currently preparing detailed regulations for the next programming period (2007 – 2013). Based on those regulations, particular national operational programmes and rules will be established.

On 14 July 2004, the EC adopted its legislative proposals on cohesion policy reform. With a total allocation of €336.1 billion EUR, or approximately one third of the Community budget, this reform aims to enable the following structural actions:

- be more targeted on the EU’s strategic priorities (Lisbon and Gothenburg agendas for a sustainable and competitive ‘knowledge economy’, European employment strategy);
- be more concentrated on the least favoured regions while anticipating change in the rest of the Union;
- be more decentralised with a simpler, more transparent and more efficient implementation

It must be remembered that the rules presented below, based on the EC proposal, are not yet approved and may be subject to several changes. We present only those rules that could refer to hybrid PPPs, whereas the reform of the funding system is much broader.

The other important issue which needs to be considered is the reason why New Member States are interested in Hybrids. It is because they are looking for additional sources for national co-financing of EU funded projects. If private sector money could be used as part of national financing then the attractiveness of hybrids would increase.

Proposed changes to the EU law affecting hybrid PPPs:

Community contribution towards total public costs

The proposed legislation assumes that within EU Funds there would be no longer any choice for the member states (in the current budgeting period the member states were allowed to choose whether to calculate the community contribution in relation to total public cost or total eligible cost).

According to the Proposal for a Council Regulation laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund15 (Further referred to as the “Regulation”), art 51(2): “The contribution from the Funds shall be calculated in relation to the total public expenditure” (definition of the public expenditure is presented in the box 1 below).

Room for interpretation

The legislation does not give a comprehensive answer as to whether in case of a PPP structure, private financing of construction would, as it is currently allowable for Cohesion Fund projects, be regarded as public expenditure16.

The EU is likely to produce guidelines how to interpret proposed changes.

It may be argued that Funds contribution calculated on the basis of the total public contribution, does not in any way hinder the participation of private partners, since private investors are willing to be involved in attractive investments, regardless of the source (national or Community) of public contribution. However, such a barrier will impact on the decision on how to finance a particular investment (EU funding only, PPP only or a hybrid).

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16 Council Regulation No 1164/94 of May 16 1994 establishing a Cohesion Fund art. 7 Rate of Assistance states “The rate of Community assistance granted by the Fund shall be 80% to 85% of public or equivalent expenditure, including expenditure by bodies whose activities are undertaken within an administrative or legal framework by virtue of which they may be deemed to be equivalent to public bodies.” Additionally the “Guide to Cohesion Fund 2000 – 2006” states: “A concession covering the construction and the operation of infrastructure eligible for assistance from the Cohesion Fund in general constitutes a legal and administrative framework, which enables expenditure incurred by the concession-holder to be regarded as expenditure to be created as public expenditure”. Furthermore, “a system of control and certification by the public authorities of expenditure carried out by the concession holder will also be required”.
On the other hand, the EU would like to ensure that Member States are involved in the project to a greater extent.

**Definition of public expenditure**

Article 2(5) of the Regulation defines ‘public expenditure’ as: any public contribution to the financing of operations whose origin is the budget of the State, of regional and local authorities, of the European Communities related to the Structural Funds and the Cohesion Fund and any similar expenditure. Any contribution to the financing of operations whose origin is the budget of public law bodies or associations of one or more regional or local authorities or public law bodies within the meaning of Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts shall be regarded as public contribution.

Directive 2004/18/EC defines the "body governed by public law" as any body:

(a) established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character;
(b) having legal personality; and
(c) financed, for the most part, by the State, regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities, or by other bodies governed by public law.

A non-exhaustive list of bodies and categories of bodies governed by public law which fulfil the criteria referred to in (a), (b) and (c) of the second subparagraph are set out in Annex III. Member States shall periodically notify the EC of any changes to their lists of bodies and categories of bodies.

The diagram below illustrates the proposed changes in the EU regulations for the Cohesion Fund. It shows a hypothetical project with the following assumptions:

- Project total cost – 100 units
- Grant rate from the EU at maximum level – 85%

The graph presents the hypothetical changes of the public sector input level, from the current regime to the currently proposed changes.

In the current budgetary period, the public sector input is 10 units. The EU maximum contribution rate is 85% of total project costs. The missing funds equal to 5 units. This can be contributed by the private sector. Both public and private money are treated as a national contribution for the purpose of calculating EU contribution. Therefore there is a possibility to reduce public sector input to zero for the given project, and use 10 units of public money for another project.

**Financing structures in Cohesion Fund – example**

According to the latest proposal, the EU will still contribute to the project. However, in this situation, the EU contribution is proposed to be only 85% of the total required public input (public input is combined national government and EU). In this scenario the national government will need to assess the total cost of the project and the amount the private sector will contribute. The national government must provide 15% of the remaining amount needed. The EU will then contribute up to the maximum of the remaining 85% of the outstanding total cost of the project (the financing gap).

**Rate of grant and revenue generating projects**

It has been argued when considering hybrid financing structures for past projects, that in the case of involvement of a PPP, often for a revenue generating projects – the rate of Community assistance is lower than for a non-PPP project. This is due to the fact that the rate of assistance cannot exceed the difference between the eligible project cost and the NPV of the expected revenues. This means that if this financing gap is lower than the co-financing rate, the EU grant is lower than it would have been,
PPIAF  Hybrid PPPs

PricewaterhouseCoopers LLP

had revenues not been present\textsuperscript{18}. Additionally, the rate for projects generating significant revenues and subsidised from Structural Fund is only 40% for Objective 1 projects (with an optional increase by up to an additional 10% in Cohesion Countries). There has been a significant change to these rules, modifying the basis on which the co-financing rate is applied. Instead of applying it to the total cost and then limiting the thus calculated assistance to the extent of the financing gap if applicable, the percentage rate is now applied to the financing gap itself.

This means that a sizable national contribution is always required to bridge the remaining part of the financing gap, which may be problematic for Member States that have high investment needs and limited budgets. This change is partially offset by the fact the Structural Funds rate will no longer be reduced, but instead will be the same as for non-revenue generating projects (that is, 75% or 80% in exceptional cases in Cohesion Countries). All of the above may have the effect of discouraging national authorities from engaging in revenue generating PPP projects.

\textsuperscript{18} Art 53 (4) of the Regulation says “for aid to businesses, public aid granted under operational programmes shall respect the ceilings on state aid”.

Art 54 of the regulation says “For the purposes of this Regulation, a revenue-generating project shall be any project involving an infrastructure the use of which involves fees borne directly by users and any operation resulting from the sale or rent of land or buildings. 2. Public expenditure on revenue-generating projects shall be calculated on the basis of the investment cost less the current value of the net revenue from the investment over a specific reference period. The calculation shall take account of the profitability normally expected of the category of investment concerned and of the application of the polluter-pays principle, and, if necessary, of the principle of equity linked to the relative prosperity of the Member State concerned.”
Mobilisation of private financing

However, art 50(d) of the Regulation provides that the contribution of the Funds shall be modulated in light of, among others, the rate of mobilisation of private financing, in particular under public-private partnerships, in the fields concerned. The intention behind such a rule is to avoid situations in which the involvement of private sector financing is possible, but for certain reasons, EU financing is considered easier and cheaper to obtain. This follows the additionality principle, which is to make sure that EU funds are spent on projects that would be difficult to realize without this support.

This area will need more elaboration from the side of the EC, in order to be properly implemented.

Step in rights

The general principle relating to the durability of EU-funded projects (regarded as a barrier to effective execution of step in rights) has not changed in the proposed Regulation. However, the period during which a project cannot undergo a substantial modification19 is being extended from 5 to 7 years of the date of the financing decision of the competent national authorities or the Managing Authority (art 56 (1) of the Regulation).

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19 Substantial modification is a modification of a project affecting its nature or its implementation conditions or giving to a firm or a public body an undue advantage; or resulting either from a change in the nature of ownership of an item of infrastructure or the cessation of a productive activity.
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