Review of Lessons from Completed PPP Projects Financed by the EIB

Robert Bain

May 2009

European Investment Bank

Review of Lessons from Completed PPP Projects Financed by the EIB

Prepared by

Robert Bain

April 2009

* * *

Notice

The EIB has an obligation of confidentiality in relation to the Providers, Promoters, Commercial Lenders, PPP policy units and other persons involved in the projects referred to in this report. Neither the EIB nor the consultants employed on these studies will disclose to a third party any information that might result in breach of that obligation, and the EIB and the consultants will neither assume any obligation to disclose any further information not seek consent from relevant sources to do so.

Contents

Executive Summary	
1.	Introduction
2.	Completed PPP Projects: Statistical Overview
3.	Lessons from PPPs: International Experience
4.	Lessons from PPPs: Interviews with EIB Staff
5.	Sector Specific Lessons
6.	Latest Developments
7.	Recommendations
Appendices	
A.	Terms of Reference

Executive Summary

Overview

- The purpose of this report is to review lessons learned from public-private partnership (PPP) projects funded by the EIB. The focus is on projects that have passed successfully from construction into operations.
- PPPs represent an alternative approach to traditional public sector procurement.
 Under a typical PPP, the private sector designs, builds, finances, operates and maintains infrastructure (such as roads or schools) in return for performance-related payments from government agencies and/or the right to charge users for services. Importantly, the public sector passes project risk to the private sector where, in theory, it can be better managed.
- To date, the EIB has funded over 200 infrastructure projects which could be defined as (or share similar characteristics to) PPPs, of which 66 are now in operation and are the focus of this report.
- The EIB finances a broad range of PPP projects across the transportation, education, health, power and water sectors. Highway facilities (roads, bridges and tunnels) dominate the Bank's portfolio (60%). This is unsurprising and reflects the focus of modern PPPs across Europe and beyond at this particular point in time.
- The EIB has financed completed PPP projects in 19 countries, mainly in Europe. Projects in the UK, Spain and to a lesser extent Portugal represent more than half of the Bank's portfolio. Again this is unsurprising given the fact that these countries have been enthusiastic early-adopters of the PPP style of public sector procurement. The Bank's involvement in PPP outside Europe is limited compared to other IFIs (e.g. IFC or EBRD), but still significant in certain sectors such as water.

Methodology

- The methodology employed for this study was comprised of three elements. The first involved analysis of the performance of EIB PPP projects by reviewing the Bank's project and credit monitoring documentation. Second, a literature review was conducted to gain insight into lessons learned by other organisations about PPP projects globally.
 - The third main element of the research involved a series of semi-structured interviews
 with Bank staff (from various Directorates) about the lessons that they had learned
 from their own PPP exposure.

EIB Data on PPP Performance

85% of the EIB's PPP projects were delivered within budget, providing price certainty
to scheme promoters and financiers. This is in-line with findings from UK research
conducted by the National Audit Office and HM Treasury (79% and 80% respectively),
which is the only EU country with a substantial portfolio and regular performance
analysis.

- The Bank's reporting on cost overruns is, however, incomplete and suffers from inconsistencies in terms of definitions. The EIB is not alone in this regard. Many other project financiers face similar challenges with PPP data, data collection and data classification. However there is a sufficiency of evidence to support the conclusion that the majority (>75%) of the EIB's PPPs were delivered within budget.
- 63% of the EIB's PPP projects were delivered on-time (or early). This proportion increases to 80% if allowance is made for minor delays (up to four weeks). This is inline with UK National Audit Office and Treasury findings (79% and 88% respectively). Again, however, the data is incomplete and suffers from inconsistencies but not to the extent that the general trend (of PPPs delivering schedule-certainty) is called into question.
- 85% of EIB PPP projects were delivered in-line with their original specification. 15% of projects had their specification changed in each case, by the public sector procuring agency (which absorbed any cost increases). This is relatively high given that PPPs are often advocated for the discipline they impose on promoters in terms of preventing late specification changes. However these specification changes have not impacted on project financiers.
- Given the large number of toll roads in the EIB's PPP portfolio, the accuracy of traffic forecasts was examined. Only 1/6 of projects exceeded their early-year forecasts. 1/3 were more-or-less in line with projections. However 1/2 of toll road projects failed to meet their early-year forecasts; often by some margin (errors of 50% 70%). This pattern of forecasting error and systematic optimism-bias is similar to that revealed by other international studies examining traffic forecasting accuracy.

PPP Lessons Learned

Lessons from Outside the EIB

 Before reviewing the lessons learned about PPP projects from EIB staff, a number of organisations external to the Bank were surveyed to examine the lessons they had learned from their own PPP experiences. These external agencies included the UK Treasury, the UK National Audit Office, a UK policy think-tank (IPPR¹), an Australian PPP taskforce (Partnerships Victoria) and the World Bank.

_

¹ The Institute of Public Policy Research.

- In summary, the PPP-related lessons learned included:
 - Project selection is key (selecting projects that best 'fit' with the PPP model);
 - Public sector procurement and negotiation capabilities need to be strong;
 - PPPs work best when the procurement process is transparent and competitive;
 - PPPs are most suited to sectors where the pace of change is gradual;
 - Introducing PPP legislation can be an important, but not by itself sufficient, prerequisite for successful PPPs.
 - Successful PPPs involve meaningful, yet realistic, risk transfer;
 - Because of partially-fixed transaction costs, there is a minimum viable size for PPPs of around €25m;
 - Some projects may simply be too large and/or complex to be successfully procured as PPPs;
 - The policy focus for PPP promoters should always be on value for money;
 - Procuring agencies should not lose sight of long-term affordability, both to government and to users, when considering PPP programmes;
 - PPPs do not work in every sector (eg. in sectors that experience rapid change such as IT/ICT);
 - Promoters should remain alert to the fact that it is possible for readily bankable
 PPP projects to become prioritised over perhaps more-needed infrastructure projects.

Lessons from Inside the EIB

 17 semi-structured interviews were conducted with Bank staff from various Directorates to learn from their experiences with PPP projects. The interviews were comprised of 10 questions. Each of these questions is presented below and the answers are summarised.

Q1. How have PPPs evolved?

A. PPPs are regarded as being a natural extension of the trends for outsourcing, contracting-out and privatisation. However their evolution differed from country to country. Some countries were regarded as being mature whereas others had faltered from the start.

The early days of PPPs were characterised by people 'reinventing the wheel', deals that were generous to sponsors, attempts at overly-sophisticated financial engineering, and uncertainties about risk transfer. EU PPPs today are characterised by standardisation (eg. standard contracts), having dedicated teams (eg. PPP task forces or specialist teams at banks) and payment mechanisms that have moved from demand to focus on asset performance and availability.

Two key dangers were highlighted by interviewees: the fact that PPPs are currently politically fashionable (and hence are being proposed in countries less able to support them) and the fact that some promoters continue to see PPPs primarily as off-balance sheet vehicles for otherwise unaffordable (yet much needed) infrastructure investment.

Q2. What are the main lessons for public contracting authorities?

A. Promoters are encouraged to secure broad political and public support for their PPP initiatives, talk to (and learn from) contracting authorities that have had previous PPP experience, secure the services of good advisors and start with a relatively straightforward sector (roads or schools were mentioned in this context).

The importance of having a coherent PPP programme – a pipeline of deals – was emphasised and, again, the key issue of careful project selection was mentioned. Above all, interviewees stressed the need for proper (and transparent) procurement competitions – avoiding single bidder situations. A number of interviewees were keen to stress that PPPs were long-term relationships and, as such, promoter organisations need to be thinking long-term about developing public sector capacity to manage them from the outset.

Q3. What project risks have materialised?

A. A number of interviewees talked in terms of risks that had surprised them; many of them legal risks. One deal had reached financial close but a late and unexpected legal review subsequently caused the project to be terminated. Some contractual provisions and clauses did not work as anticipated and a number of important provisions (eg. provisions for lender compensation) remain untested. Planning risk was also mentioned as a key risk, with some planning decisions being revoked by late appeals.

Turning to the more typical project risks, construction risk featured prominently during the interviews (ground conditions, archaeology, environmental risks, permitting issues and expropriation costs) as did traffic risk. Interviewees warned that, when it comes to the residual risks that remain with the borrower, thinly-capitalised Special Purpose Vehicles (SPVs) retain limited financial flexibility.

Q4. What lessons have you personally learned from PPPs?

A. Some of the key lessons learned focussed on project size and suitability for PPPs. There would appear to be a minimum – and possibly a maximum – size for PPPs. At the upper end of the scale, interviewees stressed that some projects simply became too large or complex; particularly if the projects themselves were carved-out contractually (but were not operationally nor economically separable from other activities) or represented such a large proportion of GDP that they became highly politicized. The need to have meaningful risk transfer and private finance at risk were regarded as being very important PPP project attributes.

Concern was expressed about the level of disclosure on some PPP projects – with poor or limited information being passed to the Bank for monitoring purposes. Also of concern was the fact that, if promoters are not careful, PPPs can start to influence – or indeed lead – the planning process (the 'tail wagging the dog'). Returning to the point made earlier about PPPs being seen as being fashionable, there was a strong, vocal body of opinion that felt that PPPs are <u>not</u> a global panacea to meet infrastructure deficits.

Q5. What do PPPs do well?

A. PPPs were widely regarded as being able to deliver infrastructure assets on time and within budget. They focus the public sector on outputs (services provided by the infrastructure) and instil procurement discipline. They also force promoters to take a long-term view and protect asset maintenance. The fact that PPPs involve more stakeholders means that upfront project due diligence is more thorough, under certain circumstances they promote innovation – in terms of design and the use of new materials/technologies – and they are capable of generating significant project efficiencies when there is genuine risk transfer. Successful overcoming the insolvency of a major PPP contractor in the UK is seen as a vindication of the PPP model's market robustness.

Q6. What do PPPs do badly?

A. PPPs were criticised for been inflexible and poor at accommodating change. They can be expensive and procurement can take too long. A number of interviewees felt that PPPs were still plagued by accounting distractions (with the attainment of value-formoney playing second fiddle to achieving off-balance sheet treatment). Some questioned if achieving value-for-money was always the priority for project promoters.

Q7. How could public sector PPP contracting authorities improve?

A. There was a strong feeling that promoters should create ('build-in') procedures for institutional learning when it came to PPPs, and that they should look to adopt standardised procedures and documentation where possible. Good advisors were regarded as being key, especially when the public sector lacked strong procurement and/or negotiating skills.

The need to establish clear (and quick) lines for decision-making was emphasised by a number of interviewees. However two answers to this question dominated: the public sector should focus on value-for-money and should avoid, wherever possible, single-bid procurements.

Q8. How could EIB involvement be improved?

A. The main response to this question concerned the timing of EIB involvement in PPP projects. Almost unanimously, interviewees felt that the EIB should become involved in projects at the earliest possible stage — certainly before the selection of the preferred bidder (to ensure that the financial benefits of EIB involvement flowed to the public sector and/or users). It was felt that the EIB should not be involved in any non-competitive, single-bidding situations and that more use should be made of external experts in project appraisal.

Other improvements that could be made concerned the Bank's project appraisal process itself. It was felt that there should be more focus on the Bank's fundamental lending principles before getting into detailed project risk evaluations. Additionally, the EIB could improve some of its internal communications and could better share the lessons it learns from PPP-related experience (the purpose of this study).

Q9. If there was one thing the Bank should change...?

A. There were a number of individual responses to this question and a recurring theme. The individual responses suggested that it would be useful if EIB lending could be more conditional ("do it properly or we will not lend") and that it should be of paramount importance that projects can demonstrate value-for-money before EIB funding is provided. There was also a feeling that parts of the Bank were attracted to some deals just because they were bankable — and that this strayed from the Bank's principal remit as a public interest policy bank.

The recurring theme built on the premise that PPPs are fundamentally different from other Bank lending and, as such, might justify a dedicated, integrated PPP Unit (blending credit and technical expertise) at the EIB in which PPP experience and learning could be consolidated.

Q10. Any general comments about PPPs?

A. In general, EIB staff were supportive of any initiative aimed at improving PPP lesson learning/sharing among different teams and team members.

Sector-Specific PPP Lessons

Roads

- The roads sector (roads, bridges & tunnels) was felt to be a particularly good 'fit' with the PPP procurement model (straightforward assets; gradual pace of sector development), however traffic performance had often been below expectations. That said, PPP roads successfully locked-in maintenance (often disregarded).
- Some questions were raised about the quality of LTA² reports (variable, sometimes deficient) and the relationship between some LTAs and contractors (not as independent as expected). Unforeseen ground conditions and permitting were two of the more commonly occurring project risks. However, despite some misgivings and issues on individual projects, it was expected that roads, with or without traffic risk transfer, would remain at the forefront of PPPs in the future.

Schools

- The schools sector was also felt to fit well with PPPs. Good construction experience coupled with innovation, and clear synergies between design/build were reported. Some minor delays with individual schools were noted, but no overall problems with programme schedules or cancellations.
- The allocation of some responsibilities associated with PPP schools is still evolving (responsibility for vandalism, children during meals, third-party income, a school's carbon footprint) but, largely, school PPPs were reported to be successful. Key to that success was the buy-in by (and participation of) the head-teacher. There is some evidence that design standards may be lower than under traditional procurement, but this could in theory be addressed through better requirement specifications.

Hospitals

- The 'fit' between hospitals and PPPs was reported to be less comfortable. It was noted that value-for-money was sometimes challenging to deliver and that some promoters (eg. UK health trusts) had faced affordability problems because of their PPP hospitals. Key concerns were how to ensure flexibility of health care delivery and responsiveness to health care policy in the future in a sector where developments can happen relatively quickly.
- Costs were another concern, with PPP hospitals looking expensive compared to their conventional procurement counterparts. However it was the impact of PPPs on the planning of health care facilities and services which was of most concern; with planning being driven by the procurement process (rather than the other way round).

Light/Heavy Rail

Experience with PPP rail projects is limited to date. One metro project failed because
of a flawed concession and some construction cost components appear to vary
significantly between countries (tunnelling) – hence a call for a comparative costs
database to be established in the Projects Directorate.

_

² Lenders' Technical Adviser.

 EIB involvement in two large, heavy rail projects reinforced the view that some projects may be too large/complex to be comfortably procured as PPPs, and that PPPs are best when they are distinct, standalone projects; separable economically and operationally from other activities.

Water

- Experience with PPP water projects, both network concessions and stand-alone BOT plants, has been very mixed. Many concessions have been either cancelled or substantially renegotiated. The social and political sensitivity of the sector, especially tariff reform, has created problems for many projects. Half of the completed projects are outside the EU and have suffered badly from foreign exchange risk as contractual tariff adjustment formulae proved illusory in a crisis. Investment lagged well behind expectations, although commercial and operational efficiencies brought by the private sector are significant.
- Stand-alone BOT plants (water supply or wastewater) with take-or-pay payment mechanisms can work in the context of a well run EU utility, but should be avoided in the developing world if that leaves the basic problem of poor services to the public unresolved. Surprising technical risks have emerged, such as problems scaling up sludge treatment technology or failures. EIB could add value by developing local currency lending or guarantee mechanisms.

Latest Developments

• The credit crunch has dramatically raised the importance of EIB's role in funding the EU and global PPP market. There is therefore a window of opportunity for the Bank to make a positive contribution to the sustainability of the PPP market in addition to its favourable financing terms.

Recommednations

Key recommendations following from this review are:

- More attention needed to PPP definitions and data quality and consistency;
- There would be public policy benefits to sharing the experiences and lessons with others outside the EIB;
- The priority lessons learned should be disseminated to potential promoters;
- This form of "lessons learned" review should be updated periodically and possibly extended to other cross cutting operational themes;
- The present market situation is an opportunity for the Bank to put its monitoring information requirements on a firmer and more consistent basis;
- Further work is needed on contract award criteria to get the "best" rather than the cheapest contractor;
- Consideration should be given to creating a centralised PPP unit covering both credit and project risk issues within a common specialised team.

1. Introduction

<u>Background</u>

The EIB has financed over 200 public-private partnership (PPP) projects to date, an increasing number of which – 66 at latest count – have completed construction and have entered operations³. This internal report reviews these operational projects with a view to extracting lessons that can be used to shape the Bank's lending policies and practices in the future. This report complements and extends the 2005 EV Report⁴ that reviewed 10 PPP projects through field visits to projects and promoters, by focusing on capturing operationally relevant lessons from practitioners within the Bank.

The report is divided into six sections. Following this Introduction, a descriptive overview of the EIB's portfolio of operating PPP projects is presented (Section 2). Section 3 looks outside the EIB and summarises some of the key lessons learned about PPPs by funders, promoters and policy units worldwide. The body of the report – Section 4 – looks inwards and presents the findings from 17 semi-structured interviews conducted with Bank staff from various Directorates; Ops, RM, PJ, EV & EPEC. These interviews were designed to encourage interviewees to draw on their personal experience with PPP projects – both inside and outside the EIB – and to focus on individual lessons learned on Bank-financed transactions. The primary objective of this study is to consolidate these lessons for wider dissemination.

The penultimate section of the report – Section 5 – reflects on PPPs in the context of recent developments and the present global economic climate. Finally, in Section 6, recommendations arising from this review are presented for internal consideration.

.

³ A database query identifies 334 projects with a PPP flag, of which 68 are indicated as abandoned and 71 are completed from a project monitoring perspective, some administratively. Reasonably complete data from either monitoring or EV reports was found for 66 projects. However, a cursory review of the list reveals some projects that should not be considered PPPs. Other known PPPs do not have a PPP flag. PJ maintains a separate PPP project database with more data fields (such as whether projects have demand risk transfer or availability payments), but the information is not up-to-date.

⁴ Evaluation of PPP projects financed by the EIB. EV Report. March 2005.

2. Completed PPP Projects: Statistical Overview

Definition of PPPs

Sixty-six PPP infrastructure projects financed by the Bank were analysed as part of this review (see the project list at Appendix B). All of these projects have completed construction and are presently in operations. The projects fall within the broadly-understood definition of what a public-private partnership is or display similar characteristics. There is no single, agreed definition of what a PPP is and, as a result of this review, the Bank may wish to revisit its own collective understanding of the PPP label (see Section 6). However, generally, a PPP project would be expected to involve:

- A long-term contract between the public and private sectors;
- The delivery of an infrastructure asset(s) such as a road or group of schools and the
 provision of related services (such as operations and maintenance) over the term of
 the contract;
- A material transfer of project and financial risk from the public to the private sector;
- A payment mechanism through which the public sector compensates the private sector based on the flow of services from the asset; not for the asset itself, or where users are charged directly for using the asset (such as toll roads or water bills);
- The use of private, at-risk capital;
- Ownership of the asset reverting to the public sector at the end of the contract.

Not all of the 66 projects reviewed here meet all of these criteria; but the majority do. There will always be 'grey areas' associated with policy initiatives such as PPPs. From a definitional and statistical perspective, this is inconvenient however many regard it as a strength. One of the points of PPPs is to test the boundaries between organisations traditionally viewed as being in the public or private sectors and to explore alternative partnering structures between them. Going forward, we are likely to see new models of partnership being developed globally – many of which will be shaped by local culture and circumstance. For this reason, over-emphasis on precise and detailed definitions seems fruitless and a focus, instead, on four or five common principles – in terms of defining PPPs – would appear to be more useful.

Completed PPP Projects by Sector

Completed projects are ones that have successfully passed through their construction phase (ie. have been delivered) into the operational stage of their lifecycle. Figure 2.1 divides the Bank's completed PPP project portfolio into its respective sectors. Transport projects dominate and, within transport, road projects are the most active asset class by some margin. In fact, road projects (including bridges and tunnels) represent over 60% of all completed EIB PPP projects. This is unsurprising. Countries often roll-out their PPP policy initiatives in the roads sector or include roads in their first wave of pathfinder PPP projects. In future, as the Bank's operational PPP portfolio matures and more projects move from construction into operations, the dominance of roads in the portfolio will lessen and other assets – particularly schools and hospitals – will represent an increased share. However

given the strong and sustained focus on PPP roads in many countries – still today – it is likely that roads will continue to be an important focus for bank lending in the future.

Completed PPP Projects by Sector

45
40
30
30
30
30
15
10

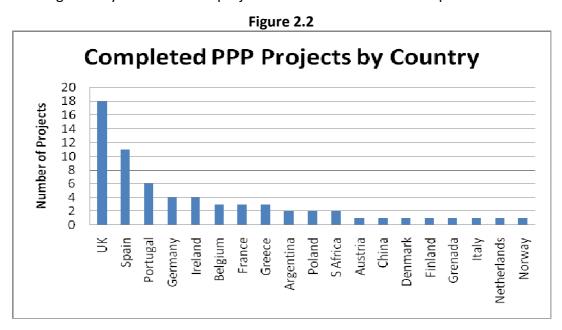
Poads

Rogitals

Figure 2.1

Completed PPP Projects by Country

Figure 2.2 provides a geographical breakdown of operational PPP projects that have secured EIB financing. Nearly a half of these projects are located in the UK or Spain.



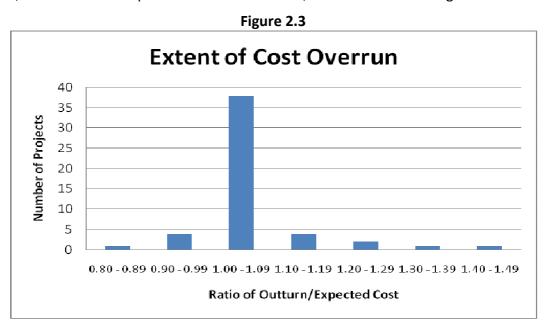
Once again, the dominant countries come as no surprise. The UK's PFI initiative launched in the mid 1990s established a model for PPPs that has been replicated — albeit with some revision — across continental Europe and beyond. Spain, a long-time proponent of the concession model for infrastructure provision, has embraced the PPP concept at both the state and the regional government (autonomous community) level — and Portugal upgraded and significantly expanded its motorway network using PPPs. The regional diversity of PPP projects in their operational phase will also evolve as the Bank's portfolio matures — given

ambitious plans in a number of countries for PPPs and the fact that many of these projects look likely to meet the EIB's lending criteria. In the interim, however, PPP projects in the UK, Spain and – to a lesser extent – Portugal will continue to dominate the portfolio.

Non-EU projects represent less than 10% of the portfolio, with a majority in water or transport. The EIB was particularly active in the ALA region in the late 1990s funding European companies who won water service concessions.

PPP Project Performance: Costs

Outturn cost data for the Bank's operational PPP projects were compiled from monitoring reports and EV reports⁵ – and were contrasted with expected values (forecasts). The results, in terms of the experience of cost overruns, are summarised in Figure 2.3.



Outturn and expected cost comparisons could be made in the case of 51 projects (80% of the operational project sample). From these 51 projects, 85% appear to have been delivered within (or under) budget. This is comparable to the results from other studies. Research from the UK by the National Audit Office⁶ and HM Treasury⁷ found that PPPs were delivering price certainty to public sector procuring agencies in 79% and 80% of cases respectively. The UK Treasury compares this with its experience of cost overrun under traditional public sector procurement — and reports that over 70% of conventionally-procured projects had cost overruns associated with them. Indeed, this is a key policy rationale for the UK's continued support for PPPs under successive political administrations.

⁵ Monitoring reports are monitoring documents compiled by Projects Directorate (PJ) staff once a project has been operating for around 18 months. EV reports contain the results from ex-post project evaluations and are compiled at a later state by the Bank's Operations Evaluation Directorate.

⁶ PFI Construction Performance, NAO, 2003

⁷ PFI: Meeting the Investment Challenge, HM Treasury 2003.

The EIB's comparative cost data is, however, not quite as clear cut as Figure 2.3 suggests. From the monitoring and EV reports, it is difficult to determine precisely what cost figures (or estimates) are being reported – or, indeed, when these estimates have been made. Sometimes reports talked in terms of an original project budget. Sometimes this budget was revised (to reflect the passing of time or changed/increased project scope). And on other occasions, the cost estimate (against which the outturn was compared) appeared to be PJ's own projections of costs made for appraisal purposes. No consistent approach or reporting format was applied.

Infrastructure cost comparisons (outturn versus expected costs) are challenging to make generally – and the EIB is certainly not alone in terms of experiencing difficulty in this regard. What costs is the Bank interested in? If it is cost to the public sector promoter alone, the Bank has little interest in cost overruns that fall on (and are usually internalised within) the private sector. Yet it is known that on some PPP projects, the private sector contractor has experienced considerable cost overruns [...]

In terms of ensuring a sustainable contractor base, is this really of no interest to a public-policy bank like the EIB? And it is widely acknowledged that, as a project moves through its planning stages, cost estimation becomes more accurate⁸. So for rigorous comparative and comparable cost evaluation, it is important that the timing associated with estimation is recorded.

It is difficult to conclude that the figures presented in Figure 2.3 are 100% accurate. There is too much inconsistency and confusion in the EIB's reports. However there is a sufficiency of evidence to support the fact that real trend is not dissimilar from that presented and that a very high proportion of the Bank's PPP projects have indeed delivered price certainty to public sector promoters and project financiers.

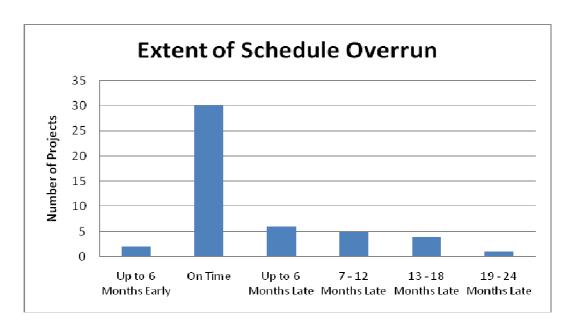
PPP Project Performance: Schedule

Comparative information about project delivery schedules (expectations versus outcome) was available for 48 of the EIB's operating PPP projects (three-quarters of the portfolio). The findings are summarised in Figure 2.4.

Figure 2.4

⁻

⁸ See 'Review of Large Public Procurement in the UK', Mott MacDonald, 2002 for details, and 'Megaprojects and Risk', Flyvbjerg et al, 2003 for a more general discussion.



If schedule certainty is defined in terms of projects that have been delivered on time – or early – then 63% of the Bank's operational PPP projects delivered schedule certainty to project promoters. If an allowance is made for minor delays – within one month – on what, after all, are large and often challenging infrastructure projects, this number increases to 80%.

Again, this compares favourably with the UK's NAO and Treasury research results which report on-time delivery for 79% and 88% of PPPs respectively. However, once again definitional issues impact on the EIB results and a lack of clarity in project completion reports suggest that the findings in Figure 2.4 should be treated a little cautiously. There are a number of issues that require some clarity/consideration:

- Schedules may be revised as a project progresses through planning and construction. Which delivery date should be used?
- PJ takes its own view on some project schedules. Should the comparison use the original schedule or the one PJ used for appraisal purposes?
- If a promoter delays the start of a project for a year, yet the contractor completes his
 work in the allocated time (duration), is the project defined as being on time or one
 year late?

Like the cost overrun data presented earlier, despite the detail of the analysis being clouded by incomplete data and inconsistent terminology/reporting, the overall trend in terms of on-schedule delivery of the Bank's PPP projects is unlikely to depart significantly from that presented in Figure 2.4.

PPP Project Performance: Specification

40 (60%) of the Bank's PPP projects were reported as having been completed to specification in the EIB reports — however this number is suspected to be an underestimation. For 16 projects, no mention of delivery to specification is explicitly made in the monitoring or EV reports. The fact that no reference is made probably reflects the

absence of any problems. It is possible that 56 (85%) of the Bank's PPP projects were delivered in line with their specification – and, intuitively, this number seems right⁹ – although it is impossible to be conclusive from the reports reviewed alone.

Of perhaps more interest is the fact that 10 projects were <u>not</u> delivered to specification. In each case, this was because the specification had been changed by the procuring agency. It did not represent failings on the part of the private sector. In some cases the scope was reduced; in others it was increased. In some cases the scope changes were minor; in others they were substantial. However, given that one of the benefits of PPPs is that they are supposed to impose disciplines on public sector procuring agencies (discussed later) it is interesting to note scope changes on a significant number (15%) of Bank's completed PPP projects.

PPP Project Performance: Traffic

Given the large number of tolled highway facilities in the EIB's PPP portfolio, attention turned to a comparison of traffic performance with expectations (forecasts)¹⁰. Data was compiled and presented as ratios (the ratio of actual/forecast traffic). If traffic outperformed its respective forecast, that ratio would be greater than 1.0. More commonly, however, the ratio was found to lie below 1.0 (see Figure 2.5).

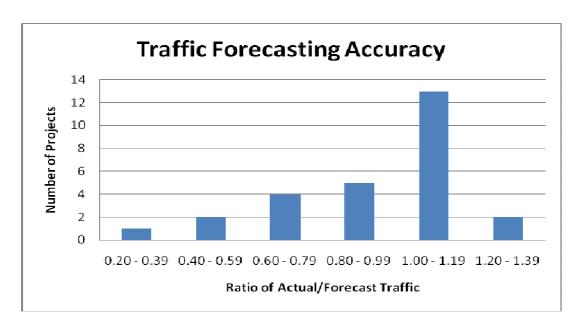
Comparative traffic performance data was available for 27 tolled highway projects (two-thirds of operating PPP roads in the portfolio). The data in Figure 2.5 shows a pronounced negative skew suggesting that over-prediction (optimism bias) was prevalent. Less than a fifth of roads out-performed their forecasts. Forecasts were deemed to be accurate for around one-third of roads. Nearly half of the forecasts reviewed were optimistic; some by a considerable margin (outturn traffic levels at or less than 50% of forecast).

Figure 2.5

-

⁹ A international survey of PPP projects conducted earlier by the author found that 85% of PPP projects had been delivered in line with their original technical specification.

¹⁰ The traffic forecasts for toll roads are of particular interest to financiers as underperformance can lead to default. Lenders to other types of roads – public sector highways or privately financed roads that employ availability-based payment mechanisms – are not exposed to traffic risk therefore forecasts are less of a concern.



The issue of traffic optimism-bias in privately financed road project forecasts is well documented in the literature and appears to be a global phenomenon. JP Morgan¹¹ (1997) found that, of 14 toll roads in the US, only one exceeded its prediction. Standard & Poor's¹² published extensively on this topic (between 2002 and 2005) and noted an average optimism bias of around 30% in forecasts from 104 international toll road studies. Vassallo¹³ (2007) finds, in Spain, over-estimation of around 35% and, most recently, Li & Hensher¹⁴ (2009) report traffic volumes lying an average of 45% below forecasts on a number of Australian tolled facilities.

Data Issues

The objective of this statistical overview was to establish the key characteristics of the EIB's operational PPP portfolio and to examine project performance at a high level. A number of issues have been raised, specifically in regards to definitions, what data the Bank should collate and how that data should be recorded in future. Chapter 6 returns to these issues and makes some suggestions for internal consideration.

_

¹¹ Morgan JP (1997), Examining Toll Road Feasibility Studies, Municipal Finance Journal, Volume 18, No. 1, Spring 1997.

¹² Bain R and Polakovic L (2005), Traffic Forecasting Risk Study 2005: Through Ramp-Up and Beyond, Standard & Poor's, London.

¹³ Vassallo, JM (2007), Why Traffic Forecasts in PPP Contracts are Often Overestimated, EIB University Research Sponsorship Programme, EIB, Luxembourg.

¹⁴ Li Z and Hensher D (2009), Toll Roads in Australia, Institute of Transport and Logistics Studies, University of Sydney, March.

3. Lessons from PPPs: International Experience

Introduction

To broaden the scope of this study and gain perspectives from outside the EIB, a number of other sources of possible PPP lessons were examined through a literature review, internet searches and direct contacts. These sources included:

- IFIs
- Government departments
- National auditors
- Policy think tanks
- PPP units

Key findings are summarised below.

International Financing Institutions

Lessons from the World Bank

The World Bank website contains a number of reports and presentations about PPPs, some of which identify lessons learned¹⁵. Recurring themes from the World Bank are summarised below:

- For successful PPPs you need strong public sector capabilities;
- PPPs have more chance of success when due attention is paid to planning and a detailed feasibility study has been undertaken;
- Good PPPs need transparent, competitive procurement;
- Good PPPs require robust monitoring and flexibility such that they can respond to/ accommodate unpredicted events;
- Avoid mega-projects from the outset to test the market and reduce the risk to the private sector;
- Governments should learn as their PPP programmes develop and make adjustments as necessary;
- Attracting international firms brings finance, credibility and know-how;
- Widespread public opposition to a PPP project can lead to public dissatisfaction and can prematurely end a concession;
- The financial profitability and sustainability of PPPs is heavily dependent on the promoter's respect of its contractual obligations;
- A solid legal framework for PPPs is needed to specify the 'rules of the game' for the private sector and reduce project risk;
- In developing or transitioning economies, a strong macroeconomic shock can create an unexpected situation for a government whereby it cannot fulfil its PPP-related contractual obligations.

¹⁵ See http://info.worldbank.org/etools/PPPI-Portal/eLibrary1.asp

...and, specifically on some of the key causes for PPP failures¹⁶:

"Most PPP failures can be attributed to inadequate or non-existent feasibility studies, including unrealistic traffic forecasts and undefined public contribution of funds. Other common reasons for failure include:

- Poor legal framework and enforcement;
- Weak institutional capacity and PPP strategy;
- Unrealistic revenue and cost estimations;
- Lack of thorough financial and economic analysis;
- Inappropriate sharing of risks;
- Lack of competitive procurement;
- Public resistance (willingness-to-pay not correctly assessed)."

Government Departments

Lessons from HM Treasury (UK)

The UK has by far the largest PPP programme in the world both in terms of numbers of projects and range of sectors. The UK's Treasury has revised its PPP guidance over the years specifically to reflect lessons learned by local and central government procuring agencies. The Treasury has identified key project characteristics that would suggest that projects *may* be suitable for being procured as PPPs (in terms of being able to deliver value for money¹⁷). In its latest guidance¹⁸, these characteristics are listed as:

- a major capital investment programme, requiring effective management of risks associated with construction and delivery;
- the structure of the service is appropriate, allowing the public sector to define its needs as service outputs that can be adequately contracted for in a way that ensures effective, equitable, and accountable delivery of public services into the long-term, and where risk allocation between public and private sectors can be clearly made and enforced;
- the nature of the assets and services identified as part of the PPP scheme, as well as the associated risks, are capable of being costed on a whole-of-life, long-term basis;
- the value of the project is sufficiently large to ensure that procurement costs are not disproportionate;
- the technology and other aspects of the sector are stable, and not susceptible to fastpaced change;
- planning horizons are long-term with confidence that the assets and services provided are intended to be used over long periods into the future; and

¹⁶ http://siteresources.worldbank.org/INTECAREGTOPTRANSPORT/Resources/Day1_Pres2_ SuccessesandFailuresPPPprojects15JUN08.ppt.

¹⁷ Value for money is defined as the optimum combination of whole-of-life costs and quality (or fitness for purpose) of the good or service to meet the user's requirements (HM Treasury, 2004). ¹⁸ Value for Money Assessment Guidance, HM Treasury, 2006.

the private sector has the expertise to deliver, there is good reason to think it will
offer value-for-money and robust performance incentives can be put in place.

Current policy advice in the UK is that projects which fail to demonstrate these characteristics should not be procured as PPPs. The Treasury specifically warns that PPPs should <u>not</u> be considered:

- for low capital value single asset projects (under £20m approx. €25m);
- for projects where there is rapid technological or other change which makes it difficult for both procuring authorities and bidders to predict with reasonable certainty the service delivery requirements and to include sufficient contractual flexibility at a reasonable price (eg. IT/ICT procurements);
- if there is insufficient market interest for competition;
- if the public sector cannot afford to pay (or be able to finance the alternative);
- if value-for-money would be achieved at the expense of employee terms and conditions;
- if the primary purpose is to remove projects from the Government's balance sheet.

Despite the Treasury advice, suspicions remain that balance sheet treatment continues to play a leading role in the support for and development of PPPs in the UK today.

National Auditors

Lessons from the National Audit Office (UK)

The National Audit Office (NAO) audits the accounts of all central government departments and agencies in the UK. It has been a prolific publisher of reports about UK PPPs since the launch of the PFI in the mid-1990s. Most of its work examines value-for-money issues. The NAO has published over 60 reports of investigations into PPP deals and, as a result of its work, has produced over 500 recommendations¹⁹. Many of these recommendations are detailed and are project-specific. Email correspondence with the NAO confirmed that it has not produced a high-level list of PPP lessons in a format that could be included in this report. However the Director of PFI Development, David Finlay, recently made a presentation about UK PPPs which included some procurement lessons learned by the NAO. Selected extracts from that presentation are reported below.

- Be realistic about the tendering schedule PPP procurement takes time;
- Identify clearly the project requirements;
- Be clear on affordability constraints;
- Ensure a good procurement competition;
- Focus on value-for-money not accounting treatment;
- Value-for-money is about more than lowest cost;
- Plan and make allowance for active project management.

¹⁹ See the NAO's database of recommendations at http://www.nao.org.uk/recommendation/search.asp

The NAO's presentation specifically highlights the importance of on-going project evaluations, "to help decisions in taking projects forward and to learn lessons for future projects."

Policy Think Tanks

Lessons from the Institute for Public Policy Research (UK)

The Institute for Public Policy Research (IPPR) was established in 1998 to provide an alternative to free market think tanks. In 2001 it published 'Building Better Partnerships', a weighty report from its Commission on Public Private Partnerships. The report was widely regarded as being an important contribution to the policy debate about the PFI in the UK.

In its summary, The Lessons of the Private Finance Initiative, the Commission points out that the arguments for PPPs are often confused. The 'good' argument is that, given the right circumstance, they can offer significant value-for-money gains and generate improvements in service quality (although it points out that the evidence on value-for-money is variable across sectors with roads and prisons scoring well but hospitals and schools scoring less well). The 'bad' argument is that PPPs – and private finance – allows governments to do more: "All PPPs are publicly funded and incur future liabilities for the exchequer²⁰."

The Commission sees the lessons from the PFI as follows:

- "The framework for public finances should be revised so that privately financed public investment is taken into account in deciding the sustainability of public finances;
- Government departments should be set an overall capital spending budget that encompasses both traditionally financed public spending and the capital value of PFI spending.
- Public authorities need to have a clear policy planning framework which integrates all forms of investment and service provision.
- PFI projects should not go ahead because a public authority believes there is no alternative.
- The accounting treatment of a PPP project should be settled <u>after</u> a decision to go ahead on value-for-money grounds has been made.
- All PPP proposals need to be subjected to a sensitivity analysis to see whether different assumption, for example, about different forms of risk allocation, would significantly alter the value-for-money assessment.
- Consideration should be given to reducing the discount rate used by the Treasury from six to five per cent²¹.
- Government should experiment with a range of procurement models for capital projects. A new mono-culture of procurement based on the current PFI model should be avoided.

-

²⁰ This of course excludes projects such as user-paid toll roads.

²¹ The Treasury's test discount rate was subsequently reduced to 3.5%, effectively raising the vfm 'hurdle' for PFI projects in the UK.

• All contracts should have explicit provisions for sharing super-profits arising from refinancing deals²²."

Lessons from PPP Units

As part of this study, PPP units in the UK, Ireland, S Africa, Australia, Greece and the Netherland were contacted about lessons they had learned from their own PPP initiatives and exposure. At the time of writing, only one had replied: the PPP unit in Victoria, Australia.

Lessons from Partnerships Victoria

Partnerships Victoria is the PPP taskforce in the State of Victoria, Australia. It is part of the Commercial Division of the State's Department of Treasury and Finance. Established in 2000, it has earned an international reputation as a progressive PPP policy unit. In correspondence about lessons from PPPs with Partnerships Victoria, [...] (26th March, 2009) reports that:

"Our approach has been to incorporate lessons learned into updates of our guidance, and to feed them directly into new projects (we have the advantage of having members of our team directly involved in all Partnerships Victoria projects). Consequently we have not ourselves published any lessons learned. In talking to people generally about the lessons we have learned, we would normally focus on the following:

- Selection of suitable projects;
- Market testing;
- Selection of suitably qualified Project Director;
- Dedicated and quality resources;
- Sufficient procurement process budget;
- Upfront project planning;
- Strong Treasury assistance in early stages;
- Issue contract with Project Brief;
- Choose sustainable, not necessarily cheapest, provider;
- Substantial consultation with bidders."

I followed-up [...] on three points: clarification of his point about the Project Director (public or private side?), the nature of Treasury assistance and how they avoid having to award to the lowest bidder. He replies:

"We're referring to the Project Director on the public side. That said however, in our bid evaluation we look closely at the proposed Project Co resourcing on the private side - Project Co's capacity to manage its sub-contractors is important, as it should be

²² The Treasury subsequently introduced a requirement for refinancing gains to be shared 50:50 with the public sector.

actively dealing with sub-contractor (and finance) issues, not just acting as a post-box between the sub-contractors and government.

In our projects, the Partnerships Victoria team within Treasury would typically allocate one person to the project working group throughout the procurement process, and also has a representative on the Steering Committee. It is important that we have this input from the beginning to ensure that lessons from other projects can be fed in and the policy and guidance are followed (or any departures are justified). It is better that we have this input from the start and keep the project on track from day 1, rather than waiting to review the project at specific decision points and then needing to initiate corrective action.

In our evaluation of bids, risk adjusted cost is only 1 of (typically) 7 or 8 criteria. Each criteria is scored, in most cases based on scores for individual sub-criteria, and the evaluation panel then determines an overall score and ranking for each bid based on both quantitative (i.e. cost) and qualitative value-for-money factors. Thus a low cost bid that ranks poorly on other factors such as master-planning, functional design, complementary commercial development, certainty of delivery etc is unlikely to be ranked ahead of a more costly bid that still beats the Public Sector Comparator and has excellent master-planning, functional design, complementary commercial development and certainty of delivery."

Lessons from Partnerships UK

Partnerships UK, itself a PPP, supports the delivery of infrastructure renewal through PPPs in the UK. The following lessons were taken from a presentation made by a senior member of PUK in late 2008²³:

General Lessons:

- PPPs do not suit every type of infrastructure investment;
- Programmes of investment are better than one-off deals;
- Market sounding and shaping is critical;
- Strong competition is critical;
- Public sector skills are difficult to retain some central support (a PPP taskforce) makes sense;
- PPPs are greatly helped through standardisation;
- Don't focus on construction alone prepare for the operational phase of projects.

...and specifically on Project Selection:

- Have clear policies with high-level ownership;
- Marry investment priorities with deliverability;
- Consider market capacity;

²³ www.mofep.gov.gh/documents/**ppp_**10.ppt

- Consider project size;
- Be clear about the requirements;
- Choose a co-operative public sector partner;
- Sort out issues/problems before going near the market;
- Consider the impact of early failure;
- Balance project selection with the importance of doing deals.

4. Interviews with EIB Staff

Introduction

In March 2009, semi-structured interviews were conducted with 17 EIB staff members; 14 in person and three by telephone. Staff were asked 12 general questions about their experiences from appraising and monitoring PPPs – focusing on operational projects. The objective was to gather key lessons together which could be used to shape the EIB's future involvement with PPPs and to examine any opportunities to enhance the value-added provided by the Bank. Interviewees were encouraged to draw on personal experiences (inside and outside the EIB) and to consider the markets, projects and outcomes from alternative stakeholder perspectives. The interviewees were assured of confidentiality.

The paragraphs below summarise the interviewee responses. Following on, specific lessons learned by sector are reviewed.

General Responses

Q1. How Have PPPs Evolved In The Sectors/Countries You Know?

To many, PPPs were seen as a logical extension of the concession, privatisation and outsourcing initiatives being pursued in a number of Western European countries for some years (following the UK example within Europe and with the support of IFIs such as the World Bank). However interviewees made clear distinctions between different countries. The UK and Spanish markets were regarded as being mature whereas other countries and sectors had faltered from the outset. The PPP experience has clearly been a learning experience for many involved. Interviewees talked in terms of early contracts which were somewhat soft in terms of risk transfer and were particularly generous to project sponsors. Other interviewees pointed out that an early focus on passing as much risk to the private sector as possible had been replaced by passing the appropriate amount of risk to the private sector.

Project participants were less clear about what they were doing (and why) in early deals and there was much duplication of effort ('reinventing the wheel'). Banks focused on clever and very (overly) detailed financial engineering. Payment mechanisms tried to be sophisticated and the performance measurement indicators used were complicated. This was back in the days before the public sector realised that some indicators were difficult and very time consuming to monitor.

Aside from revisions to the allocation of risk, interviewees reported that – more recently – PPP practices, procedures and contracts had become standardised in a number of countries. Banks established dedicated teams and slowly became more aggressive in their lending (becoming too aggressive in 2008). Risk fundamentals were now being revisited.

The topic of traffic risk was mentioned in the context of risk transfer. A clear move away from passing traffic risk to the private sector had been witnessed in some countries; although the stand-alone, self-financing toll road concession model was still popular in

others. Roads were identified as being at the forefront of PPPs generally. In some countries, PPP initiatives outside the road sector were reported to have been slow to take off.

A major concern of some interviewees was the 'fashion-factor' associated with PPPs – and their long-term affordability. Concerns were expressed that a number of the more recent convert countries to PPPs were not adopting the initiative for efficiency and value-formoney reasons. Public sector accounting distractions featured high on the list of why PPPs were popular in many countries, with the suggestion that the Bank should look more closely at the rationale for some projects (and their choice of procurement route) before deciding to advance funds.

Q2. How Have EIB Products And Their Role In The Market Evolved? Is The EIB A Leader Or Follower?

Product Evolution

Most interviewees answered this in a similar fashion. The Bank has slowly been evolving to accept more and more commercial risk. The pace of this evolution appears to have hastened recently, reflecting learning at a senior level and a deliberate policy to take more risk through its Structured Finance Facility (SFF) – although it still remains fairly conservative today.

The Bank started as a wholesale bank (part of the Treasury play); a conservative public sector lender lending to sovereign and public sector entities. It moved to lending against sovereign or bank guarantees, or in deals with monoline wraps (with, in theory, no project risk exposure). Next came guarantees with releases post-construction (once in operations if certain conditions were met). Today under the SFF the Bank is prepared to go on-risk from the outset of a project; through construction and operations.

In general interviewees were quite comfortable with this transition. A number reported that you start with guarantees, understand how things work then slowly turn off the guarantees. This seemed to be a sensible (yet still cautious) way of proceeding.

The bank is currently developing its guarantee instruments. Some scepticism surrounded the first – the LGTT product. However the feeling was that more guarantee instruments might be looked at, the Bank may develop some mezzanine products and, ultimately, may participate in equity funds/funding.

The impact of the Bank's increasing risk appetite was felt to fall hard on PJ. In the past, project risk and credit risk were decoupled. Risk assessment was about ticking boxes for economic appraisal. Now there are real risks to assess and responses varied in terms of PJ's capabilities in that regard.

<u>Leader or Follower?</u>

Despite the fact that the Bank has been identified by some governments from the outset as being a key partner (see early Greek and Portuguese PPP deals), most interviewees felt that the Bank was usually a follower; sometimes because of a lack of resources. However given the present economic situation, the Bank has switched to leader to sort some deals out. On the other hand, in terms of know-how and experience, the Bank was regarded as being a leader from the outset. Several interviewees pointed out that any further shift from follower to leader would be accompanied by a significant increase in work load (particularly on PPP projects) — further distinguishing the hours required of people working on PPP projects from those working on less risky or complex products such as global loans.

Q3. What Are The Main Lessons For Public Authorities Launching PPP Programmes?

A key lesson — mentioned many times — was the need for public sector procuring organisations to talk to and learn from others who had procured PPPs in the past. Private sector participants are often regularly involved in PPPs yet the public sector may only get one 'shot'. An asymmetry of capabilities should be acknowledged from the outset and good advisors — and negotiators — should be retained (and listened to).

More general comments centred on securing strong and broad political commitment to PPPs, starting with a technically-straightforward sector (roads or schools) – preferably as a coherent programme/pipeline of deals (avoiding 'one offs'), resisting the temptation to incorporate too much detail in contracts, making sure that projects are actually deliverable (good project selection), keeping an eye on affordability and passing the correct (not too much) risk to the private sector. There should be adequate planning (and adequate resources dedicated to planning), proper competition for the contract, realistic timescales, provisions in contracts to accommodate flexibility and in-built learning procedures. The close involvement of key practitioners (eg. head-teachers) was also underscored.

The need for the public sector to acknowledge that PPPs are long-term, active partnerships was highlighted. PPPs are not just about procurement. Having a solid understanding about payment mechanisms and penalty systems (preferably clear and simple arrangements) are vital for public sector managers. Several interviewees warned the public sector not to confuse planning and procurement when it came to PPPs, and to ensure that there was a strong policy rationale for PPPs. PPPs are a method of procurement that should follow-on from planning – if they start to dictate or drive the planning process then the tail is wagging the dog.

In closing, public sector bodies in countries new to PPPs need to be warned that it takes more than just a law (or a change in the law) to make PPPs successful. An adequate legal framework (addressing issues such as vires, step-in rights, compensation on termination etc.) is a necessary — but not in itself sufficient — prerequisite. Different elements of institutional infrastructure have to be in place for PPPs to succeed: strong watchdogs and regulators, a robust system of audit, support, good advisors, a banking system that is prepared and a public sector that has bought-into the concept and is working to become a smarter procurer.

Q4. What Risks Have Materialised Through The Project Cycle? Did Any Particular Events Take You By Surprise?

A number of interviewees discussed legal risks from the outset: a deal that had been closed but was the subject of a late legal review that terminated it [...]. Clauses that did not work as envisaged [...] – particularly sensitive when tied to the payment mechanism. And there were outstanding questions about the value of the (as yet untested) RPA²⁴ in Spain.

Other risk surprises included planning risk [...], problems with ground conditions — peat deposits between the bore holes — archaeology and environmental risks, and permitting and expropriation risk. On Spanish road deals the borrower assumed expropriation costs but these have since tripled. Interviewees emphasised a number of times the fact that thinly-capitalised SPVs have very little 'wiggle room'. The lesson here would appear to be that the concept of full 'pass through' should be treated cautiously and that SPVs probably need to retain a degree of financial flexibility.

Some of the other unforeseen risks included having too much faith in large companies (who subsequently just walked away), trying to get additional land parcels made available (at a late stage in the project) and the failure of the monoline insurers²⁵. Turning to the more usual risks, traffic risk topped the list. [...] Next there were construction risks such as tunnel blasting safety problems and binding agent-related pavement failures on some road projects. The risk of contractor insolvency was mentioned – [...] – although it was noted that all of the PPP projects affected survived the demise of that large contractor. Finally, one interviewee warned that foreign exchange risk should never be taken anywhere other than in developed countries with well developed capital markets and another cautioned that some risks simply remain to be tested (such as those associated with asset handback).

The foreign exchange risk of having debt denominated in euros and revenues in local currency, especially for basic infrastructure services such as water supply, is well known. But the speed and dramatic impact on concessions in Latin America and Asia when this occurred seemed to take everyone by surprise again. The dollar pegging of certain currencies and the supposed risk mitigation mechanism of automatic tariff adjustments in response to devaluations above a certain threshold deluded lenders into a false sense of security.

In a number of cases, technical risks related to quality materialised which it was assumed a major international contractor would avoid – such as failure to meet quality standards for a treatment plant and break-up of a road surface within a few years. The lesson seems to be

²⁵ Monoline insurers provided credit enhancement to a number of PPPs (by guaranteeing payments of principal and interest against issuer defaults), lowering the PPP's cost of capital. Thus PPP financiers were exposed to the credit quality of the insurer (AAA or AA) rather than the PPP itself. However the exposure of the monolines to the US sub-prime mortgage market (and structured finance products generally) recently caused their businesses to fail, leaving financiers – such as the EIB – exposed to underlying PPP project risk.

²⁴ Responsabilidad Patrimonial de la Administracion: a provision for full compensation to the private sector for termination of a project by the public sector procuring authority.

that winning the bid at too low a price forces even good contractors to cut corners in search of cost savings.

Q5. Have Any Projects You Know Been Cancelled Or Terminated? What Lessons Did You Learn?

Here it is important to separate the mortality rate (EIB involvement in a project is stopped pre-financing) from termination (the concession contract is cancelled post-signature). In terms of mortality rate post Board approval, interviewees felt it was very low ("95% of projects that go to the Board get financed"). EIB statistics (however unreliable) suggest that the mortality rate between identification and Board approval is far higher, but no worse than other categories of project. However people stated that quite a few projects had been terminated ("plenty"). [...]

Very few interviewees suggested any lessons learned from these cancelled or terminated projects, except for one who stated "When things don't look right – don't do it". [...]. The list of project problems included too much risk passed to the private sector, a flawed concession agreement and a very aggressive contractor.

Q6. What Are The Most Important Lessons That You Personally Have Learned About Doing A Public Infrastructure Project As A PPP?

At this stage in the interview, interviewees started to reiterate some of the points they made earlier. These points are not repeated in the text that follows.

Interviewees stated that, from their experience, the Bank should not be funding any PPP projects that have not been subjected to competitive tendering, deals sized at less than €30m should be treated cautiously (they're probably too small for PPPs and involve the same effort for low lending volumes), PPPs should not be used by promoters primarily as an instrument of institutional change and that some projects were simply too difficult/complex to be procured as PPPs²⁶, particularly those with unknown existing asset risk or simply so large (as a percentage of GDP) that they represent too big a political risk [...].

Other lessons learned suggested further cautions. It was reported that, although PPPs could make projects look better, the projects could still be located in the wrong place at the wrong time, and although IT projects should be avoided (current EIB policy) prison projects should be considered (not current EIB policy). Better monitoring and disclosure information should be made available to the Bank – through specific requirements written into financing documentation. Staff also felt that it was instructive for them to learn how PPPs work in different sectors/countries and that PPPs worked best when there was real money – private finance (both debt and equity) – at risk.

Further warnings – and issues to look out for – included the fact that PPPs were not a global panacea and that they should be used selectively, there were more chances of deals going

²⁶ [...]

wrong when their primary objectives were accounting-related, that LTAs could not always be regarding as being independent or neutral, and that contractors could hide 'fat' in subcontracts (leaving themselves appearing lean and efficient). Two interviewees focused on counter-intuitive transaction structures, warning that problems can arise when projects are split contractually yet they are not operationally nor economically separable [...]. The final lesson reported was that "We do not share enough lessons."

Q7. Compared To Conventional Procurement, What Features Of PPPs Have Worked Well Or Worked Badly?

Rather than focus on PPP features, interviewees tended to answer this question in terms of what and why PPPs do well (and what and why they do badly).

What and Why PPPs Do Well

PPPs were reported to deliver (by transferring contractor risk, using fixed price contracts and paying according to service performance), they focus attention on outputs and (mentioned by many) they bring discipline to project planning, preparations, specification and procurement. They force the public sector to be explicit about what it wants, they limit the opportunities for the public sector to change its mind and they ensure that assets are maintained in the long-term. They also enhance due diligence by having more parties review candidate projects.

There was evidence that PPPs had promoted innovation (in terms of project ideas, design and construction in the schools and roads sectors) and some interviewees felt strongly that they generated significant efficiencies in procurement and service delivery (when there is genuine risk transfer). There was also a clear sense that PPPs required the public sector to take a long-term perspective – which was viewed positively.

What and Why PPPs Do Badly

PPPs were reported to be poor in terms of allowing for future service delivery flexibility and accommodating project variations. They can be expensive [...], take too long and are plagued by balance sheet distractions. On some projects there were concerns about risk transfer ("Are we pretending?", "Is it over-egged?"). The most vocal concern about PPPs surrounded value-for-money issues — was this always properly considered? If PPPs were not structured or applied properly, it was not obvious to interviewees that they represented the best use of public funds.

Q8. What Have You Seen Public Contracting Authorities Doing In A PPP Project That Could Have Been Improved?

It was reported that public procuring authorities could improve by:

- Talking to and learning from each other and building-in procedures for institutional lessons to be learned (and retained – across the EU market, not just nationally);
- Avoiding single bid procurements;

- Moving to standardised procedures/documentation;
- Improving their procurement and, importantly, their negotiating skills;
- Hiring good advisors ("Don't employ the local professor"), listening to them and providing better guidance to bidders;
- Establishing clear and quick lines for decision-making;
- Better managing the competitive procurement process;
- Focusing more attention on value-for-money issues.

Q9. How Could EIB Project Cycle Intervention For PPP Projects Be Improved?

This question generated most consensus amongst the interviewees. They felt that the EIB should generally be involved earlier in the procurement process – certainly before selection of the preferred bidder; with more resources available to ensure that benefits flow to the public sector. When the EIB comes to a project late, most of the critical decisions will already have been taken. The Bank should get more proactively involved with project identification with weaker public promoters. Furthermore, EIB funds should be made available to all – the Bank should not get involved in multiple bidder situations. Nor should it get involved in non-competitive single bid procurements (eg. in Italy).

Other suggestions for improving the Bank's involvement in PPP projects included better project appraisal (more use of external technical experts) and better project monitoring (to feed back to appraisal and learn more). In terms of appraisal, two interviewees felt that there was too much focus on the detail of appraising projects and not enough attention being paid to fundamental EIB lending principles. Two comments were made specifically about internal communications; communications could be better between Ops and PJ ("It's not always clear what they (Ops) want") and that the Bank was not great at knowledge sharing – and there were several suggestions for the creation of a dedicated technical team to be reviewing PPP projects ("They can't be treated just like any other project"). This latter issue is discussed in more depth later.

Q10. Where Do You See The EIB Bringing Real Added-Value To PPP Projects?

Financial Added-Value

- "A decent chunk of cheap money";
- Long tenor;
- The EIB holds its loans (continuity; no sell-on);
- The Bank's involvement helps with syndication.

Non-Financial Added-Value

There was a divergence of views and considerable scepticism about some of the issues listed below.

 Reputation and experience – the Bank gives comfort to member states and is known for solid risk analysis (added due diligence/project audit – with the EIB taking the role of the technical bank);

- The Bank plays a catalytic role by stamping a quality seal on projects;
- The Bank is viewed as being impartial with no self interest (no need to pump-up fees)
 honest broker;
- The Bank plays a useful joint role between the funding group and the public sector.
 Good relations with public authorities can be useful in negotiations, can sort out problems (on the public side), can unlock stalled projects and can push things (people) at critical times.
- Dependability: the Bank is a constant player in the PF/PPP market (commercial banks tend to come and go in 3-4 year cycles);
- The Bank can be proactive in difficult times (like now).

Q11. If There Was One Thing That The EIB Should Change In The Way It Gets Involved In PPPs, What Should It Be?

A number of individual points were raised in response to this question however the answers were dominated by a recurring theme.

Individual Points

- It would be good if our lending could be much more conditional ("If you don't do it properly we won't get involved"). Sometimes there is political pressure to get involved and sort things out ("Are we really doing member states any favours?").
- Don't get involved with PPPs that don't make sense.
- Don't get involved with PPPs that don't demonstrate value for money.
- Don't get involved with PPPs that aren't structured correctly (adequate equity, ratios, reserves, tails etc.).
- Don't get involved with PPPs just because they are bankable we should seek policy success first and foremost.
- Get involved early and use First Reaction to identify problems.

Recurring Theme

A number of interviewees felt that there should be a dedicated, multi-disciplinary team at the EIB responsible for PPPs (integrating technical and financial matters) — perhaps a separate department or division/unit. People felt that the nature of PPPs (and the nature of the Bank's considerable and increasing exposure to them) justified having a centralised, specialised PPP unit looking at project risk and credit risk together — throughout the tenor of any loan. PPPs were fundamentally different from other aspects of EIB lending. It was suggested that this PPP unit would not work in isolation, however, but would retain strong links with those working separately with (and lending to) public sector promoters.

Q12. Do You Have Any General Comments To Make About The EIB's Involvement In PPPs Or How This Might Be Improved?

Several interviewees felt that there should be more comparing notes across sectors regarding contractors and their capabilities. A proper comparative cost database was regarded as being very useful to PJ (but only if it was properly resourced and updated).

Some interviewees took this opportunity to suggest that co-operation and the workings in general between different directorates in the Bank could be improved.

Two interviewees hinted at a perceived dilemma for PPPs:

"If you're a good public sector, you shouldn't need PPPs. If you're bad, you shouldn't go near them."

However earlier comments suggested that relatively few public sector procuring agencies fell into the 'good' category [...].

In closing, people stated that they were very supportive of this initiative (the PPP Lessons Study) and wanted to ensure that there was better lesson sharing/learning across the Bank.

5. Sector Specific Lessons

Having analysed the interviewee responses to each of the individual questions, the followup stage of the research was to cut across the questions to extract any particular lessons relevant to specific sectors. These lessons are summarised below under Roads, Schools, Hospitals and Heavy/Light Rail.

Roads

This sector was reported to work well in terms of PPPs. Projects are generally technically straightforward and the sector is characterised by a slow pace of development. It was identified as a strong candidate sector for the early roll-out of a PPP programme.

Despite the more recent use of payment mechanisms based on project performance and availability, a number of deals still expose lenders to traffic risk. Traffic performance (compared with forecasts) was regularly reported to have been worse than expected – and expectations were already low. Willingness-to-pay issues appeared to confound LTAs (in both developing and developed countries) – especially when the toll tariffs were relatively expensive.

It was also noted that it was possible to underestimate the strength of public opposition to some tolled projects (again when the tolls were relatively expensive). This frequently led to a tariff revision with knock-on effects on project cash flows — requiring compensation from promoters. One issue that PPPs were noted for being very good at was the locking-in and protection of road maintenance (often an early victim in times of public sector financial stress).

Questions were raised about the variability of some LTA reports and the relationship between some LTAs and particular highway contractors (suggesting that the relationship was not as arms-length and independent as might be expected). In addition, some LTAs had simply failed to anticipate problems correctly.

Other problems that had impacted on PPP roads included ground conditions (unexpected peat deposits rendering the geotechnics useless), confusion over the responsibility for latent defects, late revocation of earlier planning verdicts and environmental problems stemming from incomplete and/or late permits, licences and consents.

There were additional concerns about project selection in some countries [...]. Some PPP road costs in some countries looked high in comparison to design & build contracts – even taking account of risk transfer – although other roads were said to be very well priced in comparison [...]. Despite some general misgivings and some problems with individual PPP roads, the overall impression was that the roads sector was a very good 'fit' with PPPs²⁷ and, as such, it was expected that it would remain a particularly active PPP asset class for some time.

²⁷ As long as those countries advocating the roll-out of shadow toll road projects – eg. the UK and Portugal – keep an eye on programme affordability (discussed later).

Before moving on from the roads sector, it is worth considering the EIB's involvement in one country's roads programme [...] as a brief case study – because of the extent of the Bank's involvement, what transpired and the longer term consequences.



Schools

The school sector was also felt to 'fit' well with PPPs – in part because the assets were (again) technically straightforward. Experience with schools construction had been positive, with ideas and innovation being promoted during design and construction. It was reported that there were clear synergies between the construction and the later operation of schools - supporting the bundling of both responsibilities under the single PPP contract. Although some delays in the delivery of individual schools were noted, there had been no major problems with programme schedules or cancellations.

The support and enthusiasm of the head-teacher was regarded as being a critical factor in the success of a PPP schools project. In terms of successful delivery, no distinction was drawn between new builds and refurbishments. One warning note was sounded - that planning regulations had caused problems on one schools project – however this was partly due to the location [...].

There are some obligations in the PPP schools sector which are clearly still evolving. Who is responsible for vandalism? During school meals, who is responsible for pupils? Third-party income (from the use of sports facilities outside school hours) – should this flow to the SPV or the Local Education Authority? Who is responsible for energy consumption and the carbon footprint of a school? And there are proposals to withdraw catering services from future Facilities Management (FM) subcontracts.

There has been some criticism of PPP schools in the press following a report by CABE²⁸ on poor design standards, which it is claimed are lower than under traditional procurement. The Bank's experience cannot confirm this, but such problems could in theory be addressed through better requirement specifications.

One important lesson from the schools sector – which has a relevance beyond schools – is that PPP projects can survive contractor insolvency [...].

Hospitals

There would appear to be far more of a question mark over the suitability of PPPs in the health sector and it was stated that (a) value-for-money was sometimes difficult to deliver, and (b) that PPPs had caused affordability issues for some promoters (health trusts in the

²⁸ Assessing Secondary School Design Quality: Research Report. Comission for Architecture and the Built Environment (CABE), 2006

UK). Different countries take very different views. Wales refuses to use PPPs for hospitals and there are some signs that England may be losing enthusiasm. Different models had been tried in different countries — eg. passing clinical services to the private sector in Portugal, however the Portuguese experience with PPP hospitals has been mixed [...].

The major issue with PPP hospitals is the need to ensure flexibility of health care delivery in future years. Unlike schools and roads, developments (and policy) in health care can move quite quickly. One specific example given was that of Hadron Therapy for cancer sufferers. This somewhat controversial treatment has been shunned in some countries but is being embraced in others. Also there is the issue of a possible move away from large centralised hospitals to smaller community-based facilities in the future – with the question being asked: are PPP hospitals too big?

There are also questions about the cost of some PPP hospitals, which look expensive compared with their conventional procurement counterparts. However perhaps more worrying was the pervasive influence that the PPP procurement process had on health care planning in terms of dictating the planning process (not being subservient to it). PPPs were reported to be being used to make strategic decisions – the procurement tail wagging the planning dog.

Heavy/Light Rail

[...] There also appear to be significant discrepancies in unit costs between different countries. Spain, for example was cited as a country in which tunnelling costs were much lower than in others (for no obvious reason). The desire to have an up-to-date comparative cost database (precisely for this reason) was mentioned by some interviewees during the earlier interviews.

Turning to heavy rail, the Bank's exposure to PPPs in this sector is, to date, limited. However there are suggestions that some heavy rail projects may be just too large/risky to be procured as PPPs [...].

Water

Experience with PPP water projects, both network concessions and stand-alone BOT²⁹ plants, has been very mixed. Half of completed projects are outside the EU and have suffered from foreign exchange risk -contractual tariff adjustment formulae proved illusory in a macro-economic crisis (Argentina). The main concession within the EU in the completed project portfolio suffered from lack of competitive procurement for the private partner and project incompleteness (the sewage plants were built by the PPP, but municipalities responsible for connecting the sewer networks could not fund investments). The concession had to be renegotiated.

On the plus side, private operators bring commercial and operational efficiencies to network concessions. But investment generally has lagged well behind expectations. Many concessions have been delayed, cancelled or substantially renegotiated³⁰. Expectations on water demand and the ability to raise tariffs tend to be exaggerated, both at the time of planning the concession and by bidders in order to win the contract.

In the EU, network concessions have been more successful, but even here the social sensitivity of water services, low tariffs and poor incentive structures have caused major delays (e.g. to implement the Italian Galli Law) and contract renegotiations. Stand-alone plants (water supply or wastewater) with take-or-pay payment mechanisms can work in the context of a well run EU utility, but it could be argued that regulated utilities are a more sustainable model. A number of surprising technical risks have emerged with process plants, such as failure to meet a particular quality parameter or scale-up problems for sludge treatment technology - only significant sponsor support saved the projects.

Outside the EU, the EIB could bring greater added-value by developing local currency lending or guarantee mechanisms, gaining political support for tariff reform and by avoiding BOT projects with a take-or-pay structure that leaves the basic problem of weak network operators unresolved – as this will manifest as a future counterparty risk.

_

²⁹ BOT = Build Operate Transfer.

³⁰ The EIB experiences mirrors those of other IFIs, who have found the water sector difficult for PPP.

6. Latest Developments

No report written about PPPs early in 2009 would be complete without mentioning the prevailing economic and credit climate – as this impacts not only on PPPs but, importantly, on the EIB's role regarding PPPs. This climate is characterised by global recession and a dramatic reduction in the availability of credit (the 'credit crunch').

The credit crunch has impacted on PPPs in a number of ways; most of them negative:

- A reduction in the availability of bank lending for PPPs (the bond market has been closed to PPPs for some time now);
- A significant increase in the costs of funds (when available) ie. wide credit spreads;
- No bond insurance for projects (with the failure of the monoline insurers);
- The cost of liquidity has become much more expensive;
- Construction LCs³¹ have become difficult to procure
- Market access is currently difficult for both the public and the private sectors (impacting new projects attempting to reach financial close and projects scheduled for refinancing).

On the other hand, transaction structuring has responded a number of ways – some of them positive from a credit perspective:

- Lower leverage and more equity;
- Much shorter tenor (less than ten years versus 15 30 years in 2007);
- Limited debt accretion;
- Tighter covenants.

To some extent, the transaction structuring response can be regarded as being a form of market correction after a period of careless and inappropriate bank lending which resulted in significant losses. Credit spreads on western European toll road PPP deals fell from 120bps³² in 2003 to 50bps in 2007, despite the underlying project risks remaining unchanged. Those PPP road transactions that have managed to reach financial close recently have done so with spreads over 200bps. And some PPP projects are simply failing to reach financial close at all [...]. Other deals are only achieving closure due to government intervention [...] and/or increased EIB participation [...].

It is widely anticipated that the PPP deal flow will slow; certainly in the short term³³. A limited number of PPPs are currently being signed and existing PPPs are being affected by an inability to refinance their original debts (combined with lower revenues on some projects – eg. toll roads – because of the recession and falling traffic demand). Rating agencies have downgraded a number of PPP toll road projects [...] because of reduced earnings and have placed the sector on a negative outlook.

_

³¹ Letters of Credit: third-party credit support for projects during their construction phase.

³² Basis points (ie. 1/100%) above LIBOR.

³³ Only 34 new PPP projects were signed in the UK in 2008, the smallest number since 1997 (FT, January 20, 2009).

Different countries are responding in different ways. The UK Treasury is offering cofinancing (public + private finance together) although this approach means that the public sector plays twin roles as the procuring agency <u>and</u> as part of the funding group – creating possible conflicts of interest (and some concerns among private sector financiers). In France, the plan is to provide government guarantees for all bank loans taken out by a PPP and the introduction of special tax allowances is being considered.

In Spain, for the first time there are signs of PPPs impacting on public sector ratings. S&P recently assigned a negative outlook to the Autonomous Community of Madrid (AA+) because servicing PPP debt now accounts for 60-75% of its spending – leading to low expenditure flexibility and increasing budgetary rigidity (see Box 4.1). In Ireland, six social housing PPP projects have been cancelled, a planned prison PPP was cancelled because of "problems with the credit crunch" and a PPP for a metro in Dublin is reported to be in doubt³⁴.

Against this current backdrop, the role of the EIB in terms of supporting PPPs has become critical. Funding availability from commercial banks is limited, credit margins have increased and few banks are willing to lend long (over 7 years). The EIB is one of the few lenders still providing long-term (25-30 year) debt; matching concession terms of a similar – or slightly longer – tenor; at attractive rates. Whereas the Bank was once mildly active in terms of helping PPP infrastructure projects to reach financial close, it is currently providing tens of billions of Euros to fund deals – many of these being loans for PPPs³⁵. It is difficult to foresee anything other than the EIB becoming much more involved in PPPs over the short-medium term. This has implications both for staff resource/expertise requirements and for the Bank's leverage in terms of influencing deals or requesting greater disclosure during monitoring.

³⁴ 'A Crisis for PPPs?', PSIRU January 2009.

³⁵ InfraNews, 16 March 2009

7. Recommendations

The recommendations below follow directly from issues raised in the preceding sections and from an outsider's perspective on the Banks systems for identifying, appraising, monitoring and sharing knowledge about PPP projects.

Definitions and Data

As a priority, the EIB should consider adopting a formal definition of what a PPP is. Unless this is achieved, PPPs will continue to be described variously in data bases and bank documentation — making the compilation of any PPP-related statistics difficult, confusing and inevitably incomplete. At a time when the Bank's exposure to PPPs is likely to increase — and given the public policy interest of the Bank — it should be possible to monitor PPPs and the attainment of fundamental objectives such as on-time, within-budget and to-specification delivery of large infrastructure projects better than at present.

If the EIB agrees on a formal definition of PPPs, the Bank's databases will need to be reviewed to ensure that existing project loans are categorised appropriately. Similarly, definitions for 'on time' and 'within budget' need to be agreed and used on a consistent basis. At present, these terms are based on PJ's estimates and not the promoters. Any internal EIB documentation that reports project performance against budget and/or schedule needs to very clearly define what and who's budgets and schedules are being referred to and when they were estimated. This is not the case at present.

An important follow-up to the work reported here would be to compare the performance of the EIB's PPP projects with similar projects procured via conventional (typically design & build) means. This type of comparison should be of interest to an institution with a public policy focus.

Sharing Lessons Outside the EIB

Although PPPs are widely discussed in the literature, there is only a limited amount of data in the public domain about their actual performance. Given the global attention focussed on PPPs, this is a serious failing. The EIB could contribute to the international policy debate about PPPs, for instance by releasing parts of this report for public consumption. As a first step, the findings could be shared for wider feedback on lessons learned from member state PPP Taskforces via EPEC's membership network. Later they could be published – perhaps as a magazine article or conference paper.

However it is perhaps the lessons that the Bank has learned which could be of use to <u>public sector promoters</u> which needs to be most widely publicised. During the interviews, staff mentioned a series of issues which, if brought to the attention of promoters early, would help them generally and would help them specifically to understand the EIB's perspective on PPPs, and the Bank's lending policies and priorities. An abridged guide – even a set of key bullet points – which could be given to promoters at the earliest opportunity, would clear up any misunderstandings about the Bank's stance and lending policies for PPP projects.

On-Going Review of PPPs

The majority of staff who participated in this study reacted very positively to it and the approach to sharing lessons across different teams and Directorates. As such, a periodic update of PPP experiences every few years could be a useful exercise. A similar approach could be used for similar "cross-cutting" themes such as Risk Pricing.

Information Disclosure Requirements

A number of staff involved in PPPs complained that they were not able to get (or did not see) information on an on-going basis that would allow them to effectively monitor projects for which they retained some responsibilities. The information disclosure requirements stipulated in EIB financing documentation at present appear to be weak in this regard or the Bank simply aligns with other lenders with less of a public policy perspective. At a time when the position of the Bank is particularly strong (as one of the most active PPP lenders internationally) it would appear to be timely to revisit the monitoring data requirements from borrowers, to strengthen them as necessary and to put the whole issue of information flow on a much more robust footing going forward. The information required from borrowers is not onerous — and is typically prepared anyway for other project counterparties (independent engineers, rating agencies, insurers etc.).

On the subject of disclosure, it became apparent during the staff interviews that some people were unaware that the Projects Directorate retained an ongoing interest in the performance of EIB-funded PPPs (to ensure that the objectives highlighted at appraisal were actually being achieved). It is important that staff from TMR and PJ liaise to ensure that the information disclosure requirements placed on borrowers reflect both project and credit risk; and that channels for the dissemination of the appropriate information exist (and work).

Contract Award Criteria

When PPPs get into difficulty, one of the reasons can often be traced back to the basis upon which the public sector promoter awards the concession. Contracts are commonly awarded on a lowest cost basis; sometimes despite misgivings about the parties involved or their capacity to perform. This may not represent best value for the promoter.

During this review, the author engaged in an exchange with staff from Partnerships Victoria who addressed this issue and explained how their evaluation criteria were designed specifically to avoid always having to choose the lowest bidder. This is certainly worth looking at in more detail in the context of EU Procurement Directives to examine ways in which procurement competitions in which the EIB retains an interest could be improved in future.

A Centralised PPP Unit?

Several staff interviews revealed strong support for the concept of an integrated division within the EIB that would focus solely on PPPs. Further discussions are required to

determine whether or not this idea should be advanced. It may be possible, for example, for some of the benefits of having a centralised team to be replicated within the existing organisational structure – given some changes to current practice and procedures.

Appendix A

Terms of Reference

TERMS OF REFERENCE

Review of Lessons from Completed PPP Projects Financed by EIB

1. PURPOSE

The purpose of the assignment is to summarize lessons which can be drawn from the portfolio of PPP projects financed by the EIB for which construction is complete and that are now operational.

2. BACKGROUND

The EIB has financed in excess of 200 of PPP projects both in Europe and around the world. Most PPP projects have been signed since 2000, but an increasing number are now reaching the operating phase. In the Bank's project cycle, the contact person in the Bank's Projects Directorate (PJ) is responsible for monitoring the technical progress of the project and preparing a Monitoring report once the construction phase is over and a project is operational for at least one year. Promoter contact and deal structuring is led by the Operational Directorates (OPS) inside and outside the EU. For project finance deals post signature, the Transaction Management and Restructuring (TMR) Department is responsible for monitoring the credit risk throughout the life of the Bank's loan. The Bank's Ex-post evaluation department carried out a review of completed PPP projects in 2005, but this involved an in-depth analysis of only 10 projects, mainly in transport. There is now a portfolio of over 50 completed projects, which have reached the monitoring stage. With the support of a PhD student trainee, PJ has been assembling the data on completed PPP projects from monitoring reports and other sources. The trainee (based in London) is available to support the consultant in the initial part of this assignment and is already working to produce a statistical summary of findings by end January.

The intention is to review the portfolio of PPP projects with a monitoring report and to see what lessons can be drawn for future operations. A consultant is required to oversee the analysis of data, capture lessons (particularly related to risk factors and relative performance) in each sector and country through interviews with selected staff who followed the project. The findings will be synthesised in a concise document suitable for inclusion in PJ's annual Monitoring & Learning Report. The creation of the European PPP Expertise Centre (EPEC) within the EIB offers a further network of contacts within national PPP Taskforces to follow up on national experiences and if necessary, specifics of individual projects.

3. TASKS

The following tasks are foreseen:

- (a) Brief literature review of lessons identified from existing projects and programmes, including audits, reports and papers (in collaboration with PhD student trainee and EIB PPP experts);
- (b) Complete the analysis of portfolio data to prepare a statistical summary (sectors, amounts), a summary of relative performance (delays, cost overruns, outcomes) and risks (in so far as this is meaningful given sample size). Some support should be available from trainee for this task;
- (c) Carry out structured interviews with selected EIB staff dealing with PPPs in different sectors and countries (PJ, TMR, EPEC, OPS) to identify what lessons they draw from project experience to date;

- (d) Prepare a concise report on the PPP portfolio and key lessons for future operations;
- (e) Present the findings at an internal workshop and modify the report depending on the feedback.

4. DELIVERABLES

- Deliverable 1: draft Statistical Summary
- Deliverable 2: draft Synthesis Report
- Deliverable 3: Interaction with EIB: Presentation of findings and leading internal Workshop
- Deliverable 4: Final Report

5. TIMETABLE

Assuming contract signature by 6 February 2009, deliverables by the following dates:

- Deliverable 1 by 20 February 2009
- Draft deliverable 2 by 25 March 2009
- Deliverable 3 approximately one week after submission of Deliverable 2
- Deliverable 4 Final report is due at the latest by 6 April 2009

Final report to be submitted in electronic format.

A total of 25 man-days allowed for completion of contract.

6. TRIPS TO THE BANK

Three trips to EIB are foreseen:

- An projection inception meeting should be held shortly after project signature (1 day in Bank);
- A series of interviews and meetings with staff in Luxembourg (up to 5 full days in Bank);
- Workshop (1 day in Bank).