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# UNECE

*Capacity-building programme  
on public-private partnerships*

## TRAINING MODULE

### INTRODUCTION TO PUBLIC-PRIVATE PARTNERSHIPS

**Can public-private partnerships improve  
infrastructure and deliver better public  
services?**

2012



## ACKNOWLEDGEMENTS

This training module “INTRODUCTION TO PUBLIC-PRIVATE PARTNERSHIPS” is a part of the UNECE Toolkit on “How to do PPPs”. At the first session of the UNECE Team of Specialists on Public-Private Partnerships, held in Geneva on 28-29 February 2008, countries that recently entered the PPP market expressed the need to learn from those that led the way in this field through sharing expertise, providing best practices and creation of training tools. The UNECE Toolkit on public-private partnerships is composed of training and best practice materials from a broad range of PPP sectors and regions and intended to develop core competencies and understanding of PPPs. The first pilot training event was held in Moscow within the framework of the International Conference “Taking Public-Private Partnerships forward: New Opportunities for Infrastructure Development in Transition Economies” (21-22 October 2008), jointly organized by the State corporation “Bank for Development and Foreign Economic Affairs (Vnesheconombank)”, the State University – Higher School of Economics (SU-HSE) and the United Nations Economic Commission for Europe (UNECE).

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***INTRODUCTION TO PPPs: CAN PUBLIC PRIVATE PARTNERSHIPS IMPROVE  
INFRASTRUCTURE AND DELIVER BETTER PUBLIC SERVICES?***

**Learning Outcomes**

This training module aims to provide a basic understanding of:

- how PPPs differ from traditional procurement;
- how financing in PPPs differs from traditional financing techniques and the implications of this;
- why Governments choose PPPs to improve infrastructure and the delivery of essential services;
- how to make PPPs successful through effective risk allocation;
- the different stages of the PPP lifecycle;
- good governance in PPPs;
- how projects could go wrong and a how to anticipate and prevent such occurrences; and
- the significance of political will and how it can be sustained.

1. **INTRODUCTION**

- 1.1 A key challenge facing Governments around the world is the need to provide better services in transport, electric power, waste disposal, access to clean water and sanitation, health and education, among others. The demand for these services is increasing as economies return to growth and as populations' age. However, in many countries much of the infrastructure has been lacking regular and sufficient investment over many years. Improvement requires new investment, but Governments have to maintain tight control over their expenditures and keep taxation low.
- 1.2 One option might be to transfer full responsibility for these infrastructure to the private sector but this may not be feasible in most cases (e.g. if market conditions are not attractive or there are growing social or national security reasons why transferring the facility to the private sector would not be appropriate or desirable). Subsequently, many Governments are increasingly attracted to a middle way which combines the state with its strengths in regulation and the protection of the public sector and the private sector with its strengths in finance, management and innovative technologies. This middle way is known as a Public-Private Partnership ("PPPs"), which is currently being adopted worldwide. However, even with this wide adoption, the term "PPP" is still not clearly defined.

**Definitions of PPP from Various Sources**

Definitions of PPP
<p><b>HM Treasury:</b> An arrangement between two or more entities that enables them to work cooperatively towards shared or compatible objective and in which there is some degree of shared authority and responsibility, joint investment of resources, shared risk taking and mutual benefit.</p>
<p><b>The World Bank:</b> The term "PPP" refers to a number of elements including the existence of a 'partnership' style approach to the provision of infrastructure as opposed to an arm's length 'supplier' relationship ... Either each party takes responsibilities for an element of the total enterprise and they work together; or both parties take joint responsibility for each element... A PPP involves a sharing of risk, responsibility and reward, and value.</p>
<p><b>The European Commission:</b> A partnership is an arrangement between two or more parties who have agreed to work cooperatively toward shared and/or compatible objectives and in which there is shared authority and responsibility; joint investment of resources; shared liability or risk taking and ideally mutual benefits.</p>
<p><b>The Canadian Council for Public Private Partnerships:</b> PPP is a cooperative venture between the public and private sectors, built on the expertise of each partner that best meets clearly defined public needs through the appropriate allocation of risks resources and rewards.</p>

1.3 In this module and the toolkit as a whole, PPPs are defined as:

*“Innovative, long term, contractual arrangements for developing infrastructure and providing public services by introducing private sector funds, expertise and motivation into areas that are normally the responsibility of government”.*

1.4 Broadly speaking, public infrastructure is divided into:

- **Economic Infrastructure:** Such as transportation facilities and utility networks (for water, sewage, electricity etc.) - i.e. infrastructure considered essential for day-to-day economic activity, and;

- **Social Infrastructure:** Such as schools, hospitals, libraries, prisons etc, (i.e. infrastructure considered essential for the structure of society<sup>1</sup>).

1.5 PPPs are a method by which the public sector can procure the design, construction, operation and maintenance of public capital assets from the private sector at a cost that represents value for money. Rather than the public sector directly procuring a capital asset and providing a service using that asset, the private sector establishes and finances a business which designs and constructs the required asset and uses it to provide services to the public sector. The public sector benefits from the private sector's expertise in designing, building, financing and operating the asset and the transfer of risk to the private sector.

1.6 The PPP model is now a phenomenon around the world. The UK was one of the pioneering countries implementing PPPs. Following the success of PPPs, other countries have both adopted and adapted the PPP model for their own infrastructure development. The United States has its own model in PPP, alongside the Russian Federation, which is one of the newest countries to embark on PPPs.

*UK Private Finance Initiative*

The UK developed PPP or the Private Finance Initiative (PFI) in the 1990s as a solution to the need to improve the nation's infrastructure and provision of public services without placing undue strain on public funds. As at November 2011 713 deals had been closed under the UK's Private Finance Initiative (the UK's domestic PPP model) and a further 50 are currently in procurement.

1.7 For all intents and purposes, PPPs have become an established means of improving infrastructure worldwide. There is now a rich experience of PPPs in many countries. Such experiences and specific project case studies can assist countries which are embarking on their own PPP programmes..

**This module will ask and answer the question: Can PPPs work to deliver public services to modern societies?**

<sup>1</sup> Yescombe, Public Private Partnerships

- 1.8 The issues underlined below are commonly found difficult to those first introduced to PPP's:
- 1.8.1 The **precise nature of the relationship between the public and private sectors is poorly understood**. In most cases, PPPs are understood as a general form of cooperation. Under such a definition almost all forms of interaction between the public and private sector can be perceived as a PPP. The use of such general definitions needs to be addressed in order to avoid confusion.
  - 1.8.2 The **source of funding** in a PPP. There is generally a lack of understanding on how PPPs are financed. Questions to address include: Where does the funding come from? How are the investors in a PPP project paid back? Does the state contribute financially to a PPP?
  - 1.8.3 A lack of clarity as to the **precise rationale** for PPPs: Why do Governments undertake PPPs? Is it for financial, social or even environmental reasons or a combination of factors? The rationale for a government choosing to do PPPs is closely linked to the perceived benefits from PPPs.
  - 1.8.4 **How the PPP is created - the mechanics of launching a PPP:** Who takes the lead in a PPP? The public or the private entity? What is the role of the Government vis-à-vis the private sector. These questions, along with many others regarding the lifecycle of a PPP need to be addressed. One of the challenges faced by many countries now starting out on PPPs is the lack the expertise to prepare a PPP business case. This knowledge gap leads to the use of business proposals put forward by private companies that are 'unsolicited' by the public sector and which is not desirable as a method of (or reason for) launching a PPP.
  - 1.8.5 A failure to understand the **mechanisms for making PPPs more effective**. The concept of who assumes the risk in a PPP project along with appropriate risk mitigation must be considered. There is no science to risk allocation in a PPP and it should be made clear that allocating risk is in fact the subject of long and protracted negotiations between the parties. This knowledge is critical because projects often fail because risk sharing is not balanced between the parties.
  - 1.8.6 A lack of **knowledge at the project level:** This is an important gap to address because the public sector may be fearful that the PPP model is just too complicated and as such should not be attempted. That may be true but examination of the causes of why projects went wrong show that, with more attention and care, the problems might have been avoided.
  - 1.8.7 A failure to understand the **political context of PPPs** and the importance of what has been called 'political will'. Without top level political support from the highest political authorities, PPPs will not work: investors need to have confidence that governments are going to stand behind them even in times of trouble. PPPs are sometimes perceived as lacking accountability, transparency and

as a means of making profits out of the delivery of essential public services.

- 1.9 Adopting a PPP scheme is not easy. The model is not easy to apply to infrastructure projects due to their complexity, the nature of contractual arrangements and the high level of uncertainty that arises from the long concession period.
- 1.10 To ensure the success of a PPP project, both the government and the concessionaire must be fully competent to implement the partnerships.
- 1.11 It is critical that governments are capable of adequately defining the most appropriate output specification in a PPP contract, which is the measurement by which the private sector partner is assessed. Accordingly, it is important that the performance monitoring mechanisms are properly defined with measurements that can evaluate whether the private partner has properly complied with the contractual conditions.

## 2. PARTNERSHIPS

### 2.1 PPPs consist of the following key elements:

- 2.1.1 **A long term contract** between the public sector or the client and a private sector party for the design, financing, construction, operation and maintenance of public capital assets from the private sector;
- 2.1.2 With **payment over the life of the PPP contract** to the private sector party for the provision of services and use of the asset, made either by the public party or by the general public as users of the asset; and
- 2.1.3 With the asset reverting to public **sector ownership at the end of the contract.**

### 2.2 Traditional Public Sector Procurement

- 2.2.1 Traditionally, procurement of the asset by the public sector involves using funding from tax revenues or public borrowing. In this type of procurement, the public entity sets out the specifications and design of the asset, calls for bids on the basis of this detailed design and pays for the construction of the asset by a private sector contractor. The public authority has to fund the full cost of construction, including any costs overrun. Operation and maintenance of the asset are entirely handled by the public authority, and the contractor takes no responsibility for the long term performance of the facility after the (relatively short) construction warranty period has expired.

### 2.3 How a PPP Works

- 2.3.1 In a PPP, on the other hand, the public authority specifies its requirements in terms of **'outputs'** - not 'inputs' as in traditional procurement - which set out the public services which the asset is intended to provide, but which do not specify how these are to be provided (e.g. instead of specifying the type and number of lights, the lux levels required to be achieved for the facility will be specified).
- 2.3.2 It is then left to the private sector to design, finance, build and operate the facility to meet these long term **output specifications**. The project company receives payment (service fees) over the life of the PPP Contract (25 years on average) on a pre-agreed basis, which is intended to repay the financing costs and give a return to the investors. The service fees are subject to deductions for failure to meet output specifications. An example of non-compliance in a road PPP is when the private entity fails to make all the lanes



available or if it fails to meet certain safety criteria in accordance of the output specifications. There is generally no extra allowance for cost overruns which occur during construction or in operation of the asset.

**2.4 Transfer of Risk in a PPP**

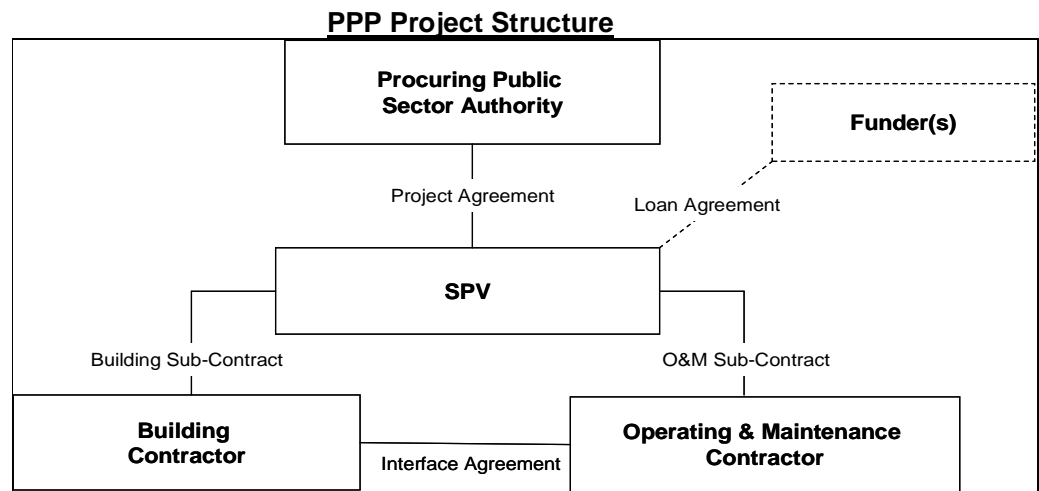
2.4.1 The result of this PPP approach is that significant risks relating to:

- the costs of design and construction of the asset;
- the cost of time overruns;
- market demand for the use of the asset;
- service provided by the asset; and
- the facility's operation and maintenance costs,

are transferred from the public authority to the contractor.

**2.5 Project Structure**

2.5.1 Understanding the structure of a PPP project is integral to the partnership process. The main contractual and financing building blocks for a typical PPP project are outlined below, describing the main parties, which include: Special Purpose Vehicles, Procuring Public Sector Authority, Funders, Building Contractor and the Operating and Maintenance Contractor. Between each party are contractual agreements that are the building blocks of the PPP project.



2.5.2 The key elements in the project structure include:

- 2.5.3 **A Special Purpose Vehicle (SPV)**, usually owned by private sector investors, which has the function to design, build, finance, operate and maintain the asset (the "**PPP Project**"). The SPV raises the funds to pay for the design and construction and to provide initial working capital largely from loans (and its shareholders).
- 2.5.4 **A Design & Build (D&B) Contract**, under which the contractor agrees to design and construct the completed PPP Project e.g. a road and related works (e.g. toll booths) to the required specification, at a fixed price and schedule.
- 2.5.5 **An Operating Contract**, under which a toll operation company provides services such as manning the toll booths, minor repairs and accident management in relation to the PPP Project.
- 2.5.6 **Maintenance Contracts**, under which a maintenance company provides road maintenance services (and where a concession agreement with the Public Authority allows for it, the collection of user fees such as tolls) in relation to the PPP Project.

## 2.6 **How does PPP differ from traditional procurement?**

- 2.6.1 PPPs are essentially contracts between the public and private sector. While there may be feelings of 'good will', sympathy, even friendship between the parties, the glue that holds the parties together is a long term legal contract.
- 2.6.2 PPPs are complex and costly in comparison to traditional procurement. They involve a multiplicity of different parties. Negotiations over PPP contracts accordingly often involve a lengthy process.
- 2.6.3 Payment to the private sector partner depends on its performance in fulfilling the contract agreement.
- 2.6.4 The major challenge for governments is to define accurately the 'output specifications' in the contract and the performance monitoring measurements to determine the extent to which the partner is complying with these output specifications.

## 2.7 **The Challenge of Defining Output Specifications**

- 2.7.1 Unlike most commercial products, infrastructure should be built to last many decades. Bridges and most airports are expected to operate for 40-50 years or more; while parts of the water distribution and sewerage systems were designed to last upwards of 100 years. During the service life of these assets, the external environment will change: new technologies will emerge, the needs of customers and end users will evolve, demand might grow or ebb, and the government will write new legislation and regulation.

2.7.2 An example of how external factors affect infrastructure development is the development of London's Heathrow Airport, Terminal 5. The core building systems of Terminal 5 at Heathrow Airport in London, U.K, for instance, are expected to operate for at least 40 years. However between the conceptualisation of Terminal 5 in the mid-nineties and its opening in 2008, the airline and airport activities changed dramatically in Europe with the surge of low cost carriers, self service and on line check in, stringent security procedures and the introduction of jumbo aircrafts. In fact, many more external changes will presumably occur in the service life of Terminal 5. The challenge of the PPP is getting the output specifications right at the beginning of the contracts to ensure the contract has flexibility to accommodate this pace of change.

### 3. FUNDING PPPS

- 3.1 The main characteristic of a PPP is its use of project finance techniques to fund the development of the infrastructure asset. The main characteristic of a project finance transaction which sets it apart from more traditional methods of financing is its reliance on the revenue generated from the project for the repayment of loans and investment. Easily understood examples are toll roads where the funds for the construction and operation of the project are generated by the users. Since the money is raised on the basis of the project and not by any major guarantees granted by the state or by a private company, this new type of project financing is known as **‘non’ or ‘limited recourse’ financing**. Accordingly, a non-recourse project finance transaction does not allow lenders and investors to turn to sovereign or private entities for recourse, should the project fail.
- 3.2 Since the loan is secured by the expected earnings of the project, a financier considers whether to go ahead with a non-recourse financed project, and will have to examine very closely the viability of the project. The lender has only recourse to the assets the loan has paid for, and the cash flow those assets may, or may not, generate. Project finance under this regime differs from the traditional financing techniques which rely on their security on a sovereign guarantee. Here the investor would have to check the ability of the government to repay its debt and would have to examine such risk elements as the country’s repayment history and its current debt burden. With a guarantee from a private company the investor would have to take account of the balance sheet of the company and assess its credit worthiness.
- 3.3 Other than being non-recourse, and reliance of the future cash flow of the projects, **project finance has other characteristics:**
- 3.3.1 It is provided for a ‘ring fenced’ project (i.e. one which is legally and economically self-contained) carried out through an SPV;
  - 3.3.2 It is usually raised for a new project rather than an established business;
  - 3.3.3 There is high ratio of debt to equity (leverage or gearing) - roughly speaking project finance debt may find 70- 95 % of a projects capital expenditure;
  - 3.3.4 The project’s company assets are likely to be worth much less than the debt if they are sold off after a default on the financing: therefore lenders exercise a close control over the activities of the project company to ensure that their loans will be repaid.
- 3.4 A variant of project financing is **concession financing**. This is the temporary or permanent granting of a license by a Government to a project sponsor, consortium or joint venture to deliver a particular service. Such a license should be sufficient to permit the sponsor to raise the necessary funds on a project financing basis. BOT, (Build Operate and Transfer) and its near neighbours, BOOT (Build Own, Operate Transfer), DBOOT (Design-Build-Own-Operate-Transfer), BRT (Build-Rent-Transfer) etc. – are various

forms of concession financing. BOT is the most common with the concession being the cornerstone of the BOT project finance model.

- 3.5 In the absence of traditional forms of guarantee as security, all the various risks that can affect the project have now to be considered seriously by the investor. These risks take many forms, political commercial, legal etc. The high risks mean that the project finance schemes are sponsored and undertaken by groups of local /international private companies and banks, either as a joint venture or consortium, so that the risks are spread amongst the parties.
- 3.6 A key challenge in PPP funding is sustainability. Governments can't risk acquiring too much debt in PPP projects especially those involving high capital expenditures such as roads.
- 3.7 How does financing in PPPs differ from traditional financing techniques?
  - 3.7.1 Project finance is the main method to finance PPPs.
  - 3.7.2 Lenders rely on the future cash flow of the project for payment of their interest and loan repayments (debt service) rather than the value of its assets or analysis of historical financial results.
  - 3.7.3 It differs from a corporate loan which is primarily lent against asset values in a company's balance sheet, and projections extrapolating from its past cash flow and profit record.
  - 3.7.4 Governments need to take care and not run up too much debt in trying to fund PPP projects.

## 4. RATIONALE

4.1 This section analyses the reasons why governments choose to undertake PPPs. The following rationales are presented:

- **Budgetary reasons**
- **Certainty of outcomes/ efficiency reasons**
- **Value for money**
- **Social and economic reasons**
- **Sustainable development reasons**

However, before getting into the various rationales, a discussion of why PPPs are an attractive option is essential.

### 4.2 Why are PPPs so attractive?

Why should Governments develop relationships with local and international private companies with a view to using them to manage national utilities and to finance essential investment requirements?

4.2.1 **First**, the private sector financing essential infrastructure needs will relieve pressure on Governments' budgetary requirements. These are extra resources and allow resources from the Government's budget to be released for other purposes.

4.2.2 **Second**, the private sector can tackle inefficiency and respond more effectively to user demands. In many infrastructure sectors in the world including in transition economies, the problem is not one of expanding capacity but making it more efficient. In the energy sector, for example, the measures to cut down on waste and make power plants more efficient are the main priority. Evidence from around the world suggests that the private sector is better in building and operating more efficient energy structures and less glamorous services such as waste disposal, water purification, etc, than the public sector.

4.2.3 **Third**, the private sector imposes discipline on projects through the profit motive and ensure that project implementation - even for large-scale projects - is speeded up: Where BOT projects have been implemented the speed in which the users have benefited from these new projects finance schemes has been impressive. In the Philippines, for example, BOT energy projects have brought thousands of milowatts of power on line within just 18 months. In telecommunications and other services, because of the private sectors use of new technologies, improvements to services can be made very quickly.

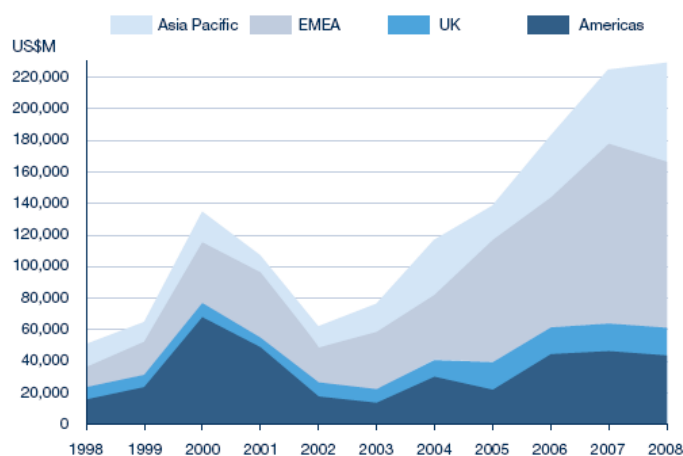
4.2.4 **Fourth**, the project finance structure is particularly suited to the environment found in some transition economies where risks and uncertainties, both economic and political, are much higher. This structure mitigates risk amongst many participants through the

employment of various financial instruments, such as escrow accounts or a syndicated credit facility.

- 4.2.5 **Fifth**, many of the benefits mentioned above would have been achieved by out-right privatization of the government function. However, this middle way of public-private partnerships can enable the general public to come to terms more easily with private and foreign involvement in the running of their public utilities.

### **Global Project Finance Volumes**

Figure 1: Global project finance volumes



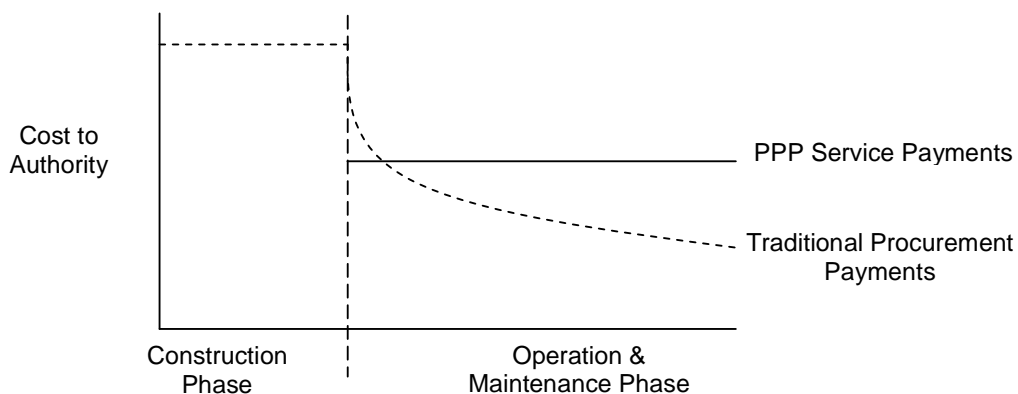
Source: Compiled from data from Thomson Reuters.  
Data for 2008 has been estimated by extrapolating data through July 2008 into the full year

- 4.3 The attractiveness of new project finance instruments such as concessions and BOT explains why demand for project finance has grown and continues to grow:
- 4.3.1 in economies around the world until the current financial crisis, private sector involvement in financing infrastructure developments and providing services was growing apace; and
  - 4.3.2 in developing countries, the use of private investment in infrastructure is growing.
- 4.4 Accordingly, the facilitators of PPP and other project finance instruments have had time themselves to respond to the new demand. Until recently there has been a huge increase in the number of international banks establishing project finance departments.

## 4.5 Budgetary Reasons

4.5.1 In the traditional procurement method for infrastructure assets, the government is required to meet the cost of constructing the asset at the time of construction. In PPP projects, construction is funded by the private sector either through debt funding alone, or more usually a mixture of debt and equity funding. Any funds borrowed for the purposes of the project (either from a lender or shareholders) are then repaid by the SPV over the life of the project out of the service payments (also known as "unitary charges") received from the Authority. This approach means that the cost of construction, operation and maintenance of the asset to the Authority is spread out over the term of the project, rather than there being a large capital outlay during the construction phase followed by lesser operation and maintenance costs (see indicative diagram below). However, in some projects capital is also injected by the public sector at the outset.

### Traditional Procurement Payments vs. PPP Service Payment



4.5.2 This approach relieves the pressure on government funding for infrastructure assets requiring large scale capital investment, freeing up public sector resources for other projects or avoiding the need to increase taxation. In addition, PPPs may also allow the government to keep the project and debt liabilities off-balance sheet (because it is the private sector and not the Authority that is borrowing), taking up less fiscal space i.e. less of the debt capacity of a nation.

## 4.6 Efficiency Reasons/ Certainty of Outcomes

4.6.1 There are various types of fee service mechanisms. Under many PPP models the public authority pays the SPV a service fee for the use of the asset and provision of any additional service. The SPV applies this revenue to meet its operating costs, debt service



obligations and ultimately provide a return on the equity for its shareholders.

- 4.6.2 The SPV operates and maintains the asset for the lifetime of the project (usually in the range of 20-30 years). In PPPs, the payment mechanism is predicated on the basis that the public sector only pays for services supplied to the required standard.
- 4.6.3 Two important foundations underlie the payment mechanism:
- (a) whether the asset service is "available" and;
  - (b) whether each of the pre-set performance service levels have been achieved.
- 4.6.4 **The principle of availability or non-availability** is fundamental to the operation of the contract and the transfer of risk to the SPV. The SPV receives full payment for providing the services provided that the asset is totally available for use. If part of the asset is not available for use the payment is reduced pro-rata or according to an agreed ratio. The overall risk of non-availability is borne by the SPV.
- 4.6.5 Availability is defined differently depending on the project. For roads it may be reflected in the lanes or particular stretches of roads or its accesses. The proportion of the deduction for non-availability can also vary between different parts of the road. So, for example, greater deductions from payment may be made for non-availability of key sections of road.
- 4.6.6 In addition to deductions for non-availability, financial penalties can also be imposed to cover delay in construction and completion of asset or poor performance of the management services during operation. Payment or part of the payment will be linked to performance levels. For example, the SPV may receive the full amount of payment if the performance level is 95%. Below this, deductions may be made on a sliding scale. In roads projects, there are also often financial penalties for failure to meet certain safety performance criteria i.e. penalties are linked to the number of accidents which take place on the project road. The SPV is, however, likely to negotiate a cap on the levels of deductions.
- 4.6.7 The provision of services by the private sector does not annul the public sector from its obligation to provide or procure the relevant service. Therefore, if the private sector continues to fail to provide the assets available or provide the service to the required standard, the public authority holds the right to terminate the arrangement and make alternative arrangements for the provision of that service. The SPV's sub-contractors will be required to enter into direct agreements with the public authority. These direct agreements give the public authority the right, on termination of the main project agreement, to "step-in" to the SPV's role as principal contractor and require the sub-contractors to continue to provide the service, ultimately protecting service delivery. The funders will also have step-in rights under direct agreements with the sub-contractors. In

### South Africa's PPP Experience

In a case study created for the PPP Unit of the National Treasury in South Africa, an excellent example emerges of how a PPP hospital revitalization project worked to empower the local community. The impetus for the revitalization of the hospital was due to the realization that an increased delivery of services to public patients was necessary, not just to private patients. In addition, the concept of "Black Economic Empowerment" is enshrined in law in South Africa and the case study cites that PPPs are "one of the most important tools for empowerment". While the hospital project did have its challenges during inception, the project delivered the social benefit as health service delivery in the community improved. Moreover, the economic benefits to the community from the hospital PPP project included an increase in employment and training of the local labour force.

practice, it is usually the funders who will step-in first and this "protection" will be set out in the project documentation.

#### 4.7 Value for Money

PPPs often offer **better value for money** than more traditional forms of procurement for the following reasons:

- 4.7.1 Risks are efficiently allocated to the party most able to manage them (*See Section 7.1: Risk Allocation Strategies*).
- 4.7.2 The process by which PPP projects are tendered encourages competition between bidders, and a reduction in overall cost.
- 4.7.3 The private sector is often considered to provide greater levels of expertise and efficiency when constructing and running infrastructure projects than the public sector. Reasons for this increased efficiency include greater innovation, a commercial approach to problem solving, better governance, improved competition and more efficient management.
- 4.7.4 The whole life-cycle approach assists in selecting the most efficient solution for the long term rather than the cheapest solution in the short term.
- 4.7.5 Having to specify the service requirements in detail for a 20-30 year contract forces the public sector to assess thoroughly their service needs.
- 4.7.6 The payment mechanism is predicated on the basis that the public sector only pays for the services supplied to the required standard, thus ensuring the agreed levels of service and maintenance throughout the term of the contract.
- 4.7.7 Assets are more intensively exploited, for example additional revenues (which are shared between the public and private sector) can result from shared use of facilities and the sale of redundant assets.

## 4.8 Trends in the Rationale for using PPPs

4.8.1 Originally the reasons for governments using PPPs were financial and budgetary. More recently governments are choosing PPPs for efficiency and value for money reasons. Yet while these reasons are valid, a case can be made for saying that PPPs should be done for a broader set of reasons than just efficiency and value for money. PPPs are about more than 'bricks and mortar', they are about delivering public services to people. Often, these public services need to reach people from socially and economically disadvantaged groups. PPPs can and should improve the access and availability of public services to all citizens.

## 4.9 Social and Economic Reasons

Some governments introduce social and economic objectives in their PPP strategies (e.g South Africa). In fact, the term "Pro-Poor PPPs" have been used to demonstrate the capability of this model to address the needs of the socially and economically disadvantaged. The challenge however is to ensure that such a group can afford to pay for the services from such PPP projects.

## 4.10 Contribution to Sustainable Development

An emerging trend in PPPs is their ability to challenge sustainable development issues posed by climate change. PPPs through its package of assets - finance, risk transfer, technology, management skills and efficiency - offer a useful tool in addressing the challenges of climate change. There are in fact, three ways in which PPPs can contribute to mitigating the effects of climate change.

4.10.1 **First**, technological innovation is required to make the significant shift to a low carbon economy and to bring about the necessary technological breakthrough, increased R&D expenditure is required - not only to develop new technologies but also to make the existing ones more affordable. PPPs can be used to mobilize the necessary resources in an effective way and to share risk efficiently in a situation where significant financial outlays under uncertain conditions are required. For example in the development of carbon capture and storage technologies, which will enable the reduction of carbon dioxide emissions arising from industrial sites, public incentives will be necessary for the private sector to accept the risks of working in these critical technologies.

4.10.2 **Secondly**, the actual PPP projects themselves directly contribute to climate change adaptation and mitigation. For example, in the waste to energy sector, disposing of waste in some countries is still often done on dumpsites or landfill - the decomposition process leading to the emission of methane which has a major effect on global warming. PPP water to energy projects capture this gas and turn it into electricity using the private sector's access to latest

technologies. Such projects are becoming standard in EU countries as a result of the EU landfill directives.

4.10.3 **Thirdly**, integrating PPP approaches into public procurement through the life cycle approach can further contribute to climate change mitigation. By combining the various elements of the project such as design and construction into a single integrated project, the PPP model adopts a whole life-cycle approach and this assists in selecting the most efficient and sustainable solution for the long term rather than the cheapest solution in the short term.

4.11 **Conclusion – Why do Governments choose PPPs to improve infrastructure and the delivery of essential services?**

4.11.1 PPPs are valued by governments because they have the power to improve the delivery of essential services. Rationales for using PPPs include: budgetary reasons, efficiency reasons and value for money.

4.11.2 In countries where needs are greatest, social and economic rationale are increasingly used, however, in all societies there is increased interest in using PPPs to protect the environment and ensure sustainable development.

4.12 The table below outlines the pros and cons of PPPs:

**Pros and Cons of PPPs**

PROS
<ol style="list-style-type: none"> <li>1. PPPs make projects affordable.</li> <li>2. PPPs maximize the use of private sector skills.</li> <li>3. Under PPPs, the private sector takes life cycle cost risk.</li> <li>4. With PPPs, risks are allocated to the party best able to manage or absorb each particular risk.</li> <li>5. PPPs deliver budgetary certainty.</li> <li>6. PPPs force the public sector to focus on outputs and benefits from the start.</li> <li>7. With PPPs, the quality of service has to be maintained for the life of the PPP.</li> <li>8. The public sector only pays when services are delivered.</li> <li>9. PPPs encourage the development of specialist skills, such as life cycle costing.</li> <li>10. PPPs allow the injection of private sector capital.</li> <li>11. PPP transactions can be off balance sheet.</li> </ol>
CONS
<ol style="list-style-type: none"> <li>1. Does sufficient private sector expertise exist to warrant the PPP approach?</li> <li>2. Does the public sector have sufficient capacity and skills to adopt the PPP approach?</li> <li>3. It is not always possible to transfer life cycle cost risk.</li> <li>4. PPPs do not achieve absolute risk transfer.</li> <li>5. PPPs imply a loss of management control by the public sector.</li> <li>6. PPP procurement can be lengthy and costly.</li> <li>7. The private sector has a higher cost of finance.</li> <li>8. PPPs are long-term, relatively inflexible structures.</li> </ol>

Source: *Delivering the PPP Promise (PWC) 2008*

5. **WHAT ARE THE CRITICAL STAGES OF A PPP?**

5.1 The stages by which a PPP is born and becomes fully operational are set out in the table below. It is important to state that PPPs are brought into existence by the initiatives of governments. It is the governments, not the private sector which fixes the parameters in which the partnership is formed. It is the Government not the private sector which sets the policy for PPPs, whose goals and objectives are that rationale for creating PPPs. It is the Government also which organises the methods by which the private sector partners are selected.

**PPP Project Lifecycle**

The Four Phases of The Life of a PPP Project	
<p><b>1. Initial feasibility</b></p>	<p>This is the period during which the Authority considers whether direct public-sector procurement or indirect procurement through a PPP is the appropriate route, and decides in principle to proceed with the project on a PPP basis. The presentation of the project, taking all these factors into account, for political approval within the Authority (or to regional or central government) is known as the ‘Business Case’, which is often publicly available. The Authority needs to set up a project-management structure to manage the process thereafter.</p>
<p><b>2. Procurement phase.</b></p>	<p>The period during which: bids are requested and received, and a bidder is chosen.</p> <ul style="list-style-type: none"> <li>- An SPV is formed, in whose name the PPP Contract and the various Subcontracts for construction, service delivery/operation, etc. (all of which are known collectively as the ‘Project Contracts’) are negotiated.</li> <li>- The Authority’s due-diligence process is completed, the investors’ equity investment and the lender’s funding are put in place. It should be noted that ‘public procurement’ is used in this context to mean the process whereby an Authority enters into a contract with a private-sector supplier, to be distinguished from ‘public-sector procurement’, which is used to mean direct procurement by the Authority instead of via a PPP.</li> <li>- The end of the public-procurement phase is known as ‘Financial Close’ (or the ‘Effective Date’), i.e. the point at which all the inter-linked conditions precedent for the Project Contracts and the funding are met, and construction of the facility or infrastructure can begin.</li> </ul>
<p><b>3. Construction phase</b></p>	<p>Once a project has reached Financial Close, the Authority’s relationship with the SPV (the "Project Company") (and through the Project Company, with the investors, lenders, and Subcontractors) is one of the contract management. During the construction phase the project’s debt and equity investment are drawn down, and these funds are used to build the facility- the end of this process, when the facility is formally accepted as being available for use as specified in the PPP Contract, is known as the Service Availability Date (or the Service Commencement Date).</p>
<p><b>4. Operation phase</b></p>	<p>The period during which the facility provides the services required by the PPP Contract and produces cash flow to pay the lenders’ debt service, and the investors’ equity return. The Authority’s contract management role continues.</p>

Source: *Public Private Partnerships. ER. Yescombe 2007*

5.2 **Procurement**

5.2.1 Following the preparation of a business case for a project, and the approval of the project by the Authority, the Government then typically tends to procure the ,PPP using a method of competitive tendering often prescribed in legislation or in internal government practice manuals. Such procurement processes are intended to produce competition between bidders so as to achieve the best quality bid at the most competitive price. The precise procedure used will depend largely on the applicable legal system but will generally include the following stages.

**The Stages of Procurement**

Stage	Description
Advertising the project	The Authority advertises the contract by publicising details of the project in some form of mass media such as a journal or newspaper. The advertisement should set out the basic details of the project and invite expressions of interest. The Authority may also undertake a road show to increase awareness of the project.
Expressions of interest	Private sector contractors register their interest in bidding for the project with the Authority.
Pre-qualification	The Authority sends out a pre-qualification questionnaire to those private sector contractors who expressed an interest in the project. The pre-qualification questionnaire is designed to assess whether the bidders have sufficient technical ability, capacity, financial standing and experience to carry out the project. The pre-qualification questionnaire should set out the criteria and methodology used to evaluate bidders. The Authority applies its pre-qualification criteria to the responses received and selects those bidders it wishes to submit bids. Typically at least four but no more than five bidders are selected so as to ensure meaningful competition without overburdening the Authority.
Invitation to tender	The selected bidders are then invited to submit tenders. Bidders are usually given a period of two to three months to prepare their tenders. During this period the bidders may seek clarification about the project from the Authority.
Evaluation and selection of the preferred bidder	The Authority evaluates the tenders on the basis of the pre-determined criteria and selects one preferred bidder and one reserve bidder.
Potential BAFO (Best and Final Offer)	If the Authority is unable to choose a preferred bidder from the tenders received because two or more of the tenders are of equal quality, the Authority may request that those bidders submit a best and final offer.
Award	The Authority may request the preferred bidder to clarify certain issues but the terms of the deal should be essentially fixed at preferred bidder stage. The authority then makes the decision to award the contract.

5.2.2 For the process to be effective (and to avoid legal challenge), the principles of transparency and equal treatment of bidders should be applied throughout.

- 5.2.3 The key objective of this stage in the PPP and these above mentioned procedures is to select the best concessionaire and the government needs to establish a feasible procurement framework in order to achieve this objective. Apart from setting up the procedures, the government needs to have some selection methods and some criteria on which to make its selection.

### 5.3 Concessionaire selection methods and criteria

- 5.3.1 According to HM Treasury, a tender should only be selected as the preferred tender and subsequently awarded the contract when it satisfies criteria including: meeting output specifications, whole life value for money, acceptance of key contract terms and required transfer of risks, confirmation of access to finance, unitary charge affordable to the public client and a cohesive consortium. A number of tender evaluation methods and criteria are developed to assist government in selecting such a right concessionaire.

- 5.3.2 **Evaluation methods:** Some tender evaluation methods that are currently in use include: the simple scoring system, NPV method, multi-attribute analysis, Kepner-Tregoe decision analysis technique, two-envelope method, NPV method plus scoring method, and binary method plus NPV method.<sup>2</sup> Simply put, the binary method, simple scoring method and two envelop method may be more appropriate for simple and small projects; the NPV method may be more appropriate for projects with no technical problems; and the multi-attribute analysis and the Kepner–Tregoe decision analysis technique may be more suitable for complex PPP projects. Different governments may use different methods or a combination of different methods to evaluate tenders. For instance the Hong Kong government uses the Kepner–Tregoe decision analysis technique to select the concessionaire for its BOT projects; the UK government uses both the NPV method and the multi-attribute analysis to evaluate tenders for PFI projects. Although different methods have their advantages and disadvantages, among these methods, the NPV method and multi-attribute analysis are the two most commonly used methods. They are also the two most recommended by experts and experienced practitioners.

- 5.3.3 **Evaluation criteria:** A variety of tender evaluation criteria for PPP projects exist and these evaluation criteria are classified into four packages: financial, technical; safety, health, and environmental and managerial. The top ten criteria in the first two criteria packages and the top five criteria in the last two packages are summarised below. A proper set of evaluation criteria should be determined on the basis of the Authority's objectives, the project characteristics and the uniqueness of the particular PPP scheme. In addition, weights that reflect the relative importance of each set of criteria should also be assigned.

<sup>2</sup> Zhang 'concessionaire selection... April 2004

**Significant Evaluation Criteria**

<p><b>Financial Criteria</b></p> <ul style="list-style-type: none"> <li>• Sound Financial Advice</li> <li>• Net Present Value</li> <li>• Tariff/toll setting up and adjustment mechanism</li> <li>• Ability to address commercial risk (e.g: supply and demand risks)</li> <li>• Minimal Financial risks to the Client</li> <li>• Internal rate of return</li> <li>• Financial Strength of the participants in the project company</li> <li>• Total Investment Schedule</li> <li>• Concession period</li> <li>• Strong Financial commitments from Shareholders</li> </ul>	<p><b>Technical Criteria</b></p> <ul style="list-style-type: none"> <li>• Qualifications and experiences of key design and construction personnel.</li> <li>• Conforming to client's requirements</li> <li>• Competencies of designers/sub-designers</li> <li>• Contractor/subcontractors</li> <li>• Conforming to design requirements</li> <li>• Construction programs and abilities to meet them</li> <li>• Design and Construction quality control schemes</li> <li>• Maintainability</li> <li>• Design Life</li> <li>• Design Standard</li> <li>• Quality Management and assurance systems</li> <li>•</li> </ul>
<p><b>Safety, Health and Environmental Criteria</b></p> <ul style="list-style-type: none"> <li>• Conformance to laws and regulations</li> <li>• Control of air and water pollution</li> <li>• Past environmental performance</li> <li>• Protection of items of cultural/archeological values</li> <li>• Management safety accountability</li> </ul>	<p><b>Managerial Criteria</b></p> <ul style="list-style-type: none"> <li>• Project management skills</li> <li>• Constitution of the management, their qualification and experience</li> <li>• Coordination system within the consortium</li> <li>• Leadership and allocation of responsibilities in the consortium</li> <li>• Working relationships among participants.</li> </ul>

**5.4 Conclusion: the various stages of the PPP Process**

- 5.4.1 The Authority needs to go through these stages in order to ensure that the project meets its various outcomes.
- 5.4.2 Although the concessionaire is the principal participant that is responsible for the implementation of a PPP project, it is the Authority which needs to be actively involved in the project life cycle phases to ensure that the project meets its quality and delivery objectives. This involvement can be achieved through the establishment of an interdisciplinary team (which will generally include the appointment of external financial and legal advisers) that continuously monitors project progress, assesses and improves critical aspects and maintains timely and productive team communications and discussions of quality control and quality assurance measures.



## 6. EFFECTIVE PPPS

- 6.1 An effective PPP is one where the partners feel ownership of the project together and this comes about when there is a fair allocation of risk between the different partners.
- 6.2 The guiding principle for **risk allocation in PPPs** is that each risk should be borne by the party best able to manage it and at the least cost. Since it is no longer directly procuring the asset, the Authority no longer bears many of the risks inherent in the design, construction and operation and maintenance of capital assets. The following table sets out some key risks in roads projects and the typical contractual risk allocation:

**Types of Risks**

Risk Type	Description	Authority	SPV	Shared
Approvals	Risk of failure to obtain/delay in obtaining government approvals and planning consents	X		
Environmental	Risk of contamination and associated costs of clean up			X
Land access rights	Risk of failure to obtain/delay in obtaining the consent of third parties to access land for purposes of construction and/or operation and maintenance of the road	X		
Design and construction	Risk that the design will prove inadequate and risk of time and cost overruns during construction		x	
Demand	Risk that the volume of traffic using the road will be lower than projected	Allocation of traffic demand depends on payment mechanism e.g. if based on availability, risk remains with the Authority whereas is based on tolls, risk is transferred to the Contractor.		
Political risk	Risk of adverse political events	X		
Force majeure	Risks of occurrences beyond the control of the parties e.g. earthquakes, floods, war etc.			X
Operation and maintenance	Risk that the cost of running the road varies from projections e.g. the road needs more frequent resurfacing than expected		x	
New technical or environmental standards	Risk of the introduction of new technical or environmental standards			X

- 6.3 Roads PPP projects often involve significant interfaces with third parties during both the construction and the operational phases. The construction and operation of roads usually requires co-ordination with a number of other public/private entities, including railway operators, owners/operators of connecting roads and utilities companies and such interfaces must be expertly managed.
- 6.4 The SPV (being newly formed and typically very thinly capitalised) is itself unlikely to have the resources or capacity to bear transferred risks. Accordingly, the SPV will endeavour (through the various sub-contracts that it enters into) to lay off these risks to those parties who have the appropriate resources and capacity either to withstand them or to manage and control them. Inevitably some risks, such as demand risk, will have to remain with the SPV and, in effect, be borne by the providers of finance to the SPV (namely, its shareholders and lenders).

## 7. RISK ALLOCATION STRATEGIES

- 7.1 Most risk factors under the political (e.g. uncertainty of governments policy and instability of government), financial (e.g. inflation risk and interest risk) and legal (e.g. changes in law and regulation and inefficient legal processes) categories should be assumed by the government. Most operation-related risks should be retained solely by the private sector (e.g. technical and management risks) or shared by the public and private sector (e.g. demand and supply risks)
- 7.2 Focusing on the PPP/PFI projects in the UK, research was conducted by a survey of people and organisations experienced in such projects with regard to how risks should be allocated between participants. The results show that site availability and political risks should be retained by the governments, while relationships risks, the risks of legislation changes and force majeure risks should be shared by both the public and private sectors. The majority of the remaining project related risks, risks that are directly associated with the project itself, should be assumed by the private sector. The research also found four risk factors (level of public support project approval and permits, contract variation and lack of experience) that could not be clearly allocated to a specific party.
- 7.3 Although risk allocation strategies in the real world may vary from project to project and from country to country, in general risks that are related to the environment within which the project is implemented should be retained by the government, while the risks that are directly related to the project are mostly allocated to the private sector. Some risks that are beyond the control of both the private and public partners should be shared by both parties. The implementation of these principles in the real world is, however, very difficult.

8. **GOOD GOVERNANCE IN PPP**
- 8.1 For a country to be successful in introducing and maintaining successful PPPs, they need to have in place the enabling institutions, procedures and processes necessary to be able to follow in the footsteps of countries with a mature history of PPP projects and engender an environment of good governance in PPPs.
- 8.2 There are six key principles that are widely accepted by institutions such as the International Monetary Fund, the World Bank Institute and Organisation for Economic Co-operation and Development as reflecting **good governance**. These principles are:-
- 8.2.1 **Participation:** the degree of involvement of all stakeholders;
- 8.2.2 **Decency:** the degree to which the formation and stewardship of the rules is undertaken without harming or causing grievance to people;
- 8.2.3 **Transparency:** the degree of clarity and openness with which decisions are made;
- 8.2.4 **Accountability:** the extent to which political actors are responsible to society for what they say and do;
- 8.2.5 **Fairness:** the degree to which rules apply equally to everyone in society; and
- 8.2.6 **Efficiency:** the extent to which limited human and financial resources are applied without waste, delay or corruption or without prejudicing future generations.
- 8.3 Applying the underlying principles of good governance above to the arena of PPPs the following principles for **good governance in PPPs** have been identified:
- 8.3.1 **Policy:** The PPP process requires coherent policies that lay down clear objectives and principles, identifies projects, sets realistic targets and the means of achieving them, with the overall aim of winning the support of the population for the PPP approach.
- 8.3.2 **Capacity-Building:** Governments should build the necessary capacities in a combined approach which establishes new institutions and trains public officials while at the same time using external expertise.
- 8.3.3 **Improving Legal Frameworks:** Investors in PPPs need predictability and security in legal frameworks, which means few, simpler and better rules. The legal framework needs to take account of the beneficiaries and empower them to participate in legal processes, protecting their rights and guaranteeing them access to decision-making.

- 8.3.4 **Risk:** PPPs allow risk which is most able to be managed by the private sector, to be transferred to them. However, governments also need to accept their share and help to mitigate those allocated to the private sector in mutual support.
  - 8.3.5 **PPP Procurement:** The selection of the bidder should be undertaken following a transparent, neutral and non-discriminatory selection process that promotes competition and strikes a balance between the need to reduce the length of time and cost of the bid process and acquiring the best proposal. Corruption should be penalized.
  - 8.3.6 **Accountability to the Public:** The PPP process should put people first by increasing accountability and transparency in projects and through these improving people's livelihoods, especially the socially and economically disadvantaged.
  - 8.3.7 **Sustainable Development:** The PPP process should integrate the principles of sustainable development into PPP projects, by reflecting environmental considerations in the objectives of the project, setting specifications and awarding projects to those bidders who fully match the green criteria.
- 8.4 If these principles are followed it will lay the foundations for a prosperous PPP environment, with increased political support for PPPs and leading to economic benefits for governments.

9. **PROJECT AND SECTORAL EXPERIENCES: WHEN PPPs GO WRONG**

9.1 According to a report written by Deloitte, several factors make most transportation infrastructure ideal for PPPs. First, the strong emphasis on the role of cost and efficiency helps to align private and public interests. Second, the growing (but by no means universal) public acceptance in many countries of associated user fees for assets such as roads and bridges make private financing easier in this sector than others where the government must pay the private sector a fee for providing the service. The ability to limit participation to paying customers, in the form of train tickets or bridge tolls, ensures a revenue stream that can offset all of some of the cost the private sector. Third, the scale and long-term nature of these projects are well served by PPPs.

9.2 The following section presents four cases where PPP projects in the road sector went wrong: It examines the causes and the lessons that can be learned.

9.3 **Case Study 1: Czech Republic - D47 PPP Highway Project**



At the national level, the first experience of a major PPP project in the country was the construction and maintenance of highway D47 in 2001. Unfortunately, this project was highly affected by time pressure and there was not a competitive tender organised to select a private partner. The partner was chosen through a negotiation between the Government and a private consortium. There was no feasibility or preparatory studies made prior to issuing the contract to the private company. In addition to this, a considerable amount of the national budget was paid into the project (1.1 per cent of GDP). Due to these circumstances, the contract was cancelled two years later as it had ceased to be beneficial for the state to continue. The Czech Republic unilaterally terminated the contract, which was detrimental to the public sector, while the state had to pay the penalty for terminating an already signed contract. The media made much of the penalty payments that ensued.

*Photo credit: [www.panoramio.com/photo/11479250](http://www.panoramio.com/photo/11479250)*

## 9.4 Case Study 2: Hungary - M1-M15 Motorway



The M1-M15 private toll Motorway was the first PPP road project in Hungary. The first Build-Operate Transfer (BOT) type concession was signed in 1993 with the consortium led by Transroute and CdD for the tolled motorway section from Budapest towards Austria. The total project size was c. EUR 350m. It was the first fully private funded Motorway built in Europe, purchased without a single penny of taxpayers' money. The project was funded entirely by private capital with the debt service obligations to be met from tolls collected directly by the SPV and was granted in the form of a Design-Build-Finance-Operate (DBFO) concession. The project was delivered on time and on budget by 1996.

However, the project encountered difficulties almost right from the start as the expected traffic did not materialise. The traffic projections made by the authority were overly optimistic and the toll revenue collected by the SPV was not sufficient to service the debt. In addition, the timing of the project was unfortunate: a recession, the effect of rapid economic reforms and high inflation negatively impacted the project. Moreover, the presence of an alternative road as well as delays at the border, which more than offset time savings, were major problem areas. The press characterised it as the most expensive toll road in Europe charging the highest tolls in one of Europe's then poorest countries. A well publicised legal action was commenced against the concessionaire to reduce the tolls. Many years of protracted negotiations took place and restructuring plans were elaborated culminating in the nationalisation of the project in 1999. The uncertainty surrounding the ongoing court challenge and general unpopularity of tolls led the Government to choose nationalisation as the most politically expedient solution. Shareholders lost equity and the bank lenders to the project suffered. However, even though the tolls were removed, traffic increased only marginally.

*Photo Credit: <http://www.skyscrapercity.com>*

**9.5 Case Study 3: Poland - A 2 Motorway**

The development of the A2 Motorway in Poland is part of a massive infrastructure program currently underway. The concession agreement for the development of the A2 Motorway was signed in October 2000 and defined the terms of financing and construction. The A2 Motorway's first phase stretches from Nowy Tomyśl to Konin. A consortium of 18 Polish companies forming Autostrada Wielkopolska SA (AWSA) was awarded the contract under a BOT arrangement for a concession period of 37 years (until 2037). The development of this motorway is the largest privatized road project underway in Poland and in conjunction with the other phases of development, the Polish government aims to construct 2,500 kilometres of motorway by the year 2015<sup>3</sup>. Despite the ambitious goals for the development of this motorway, the issue of high tolls for high vehicles (HVs), which include freight vehicles, was a hindrance. The toll for HVs was almost ten times the toll for cars. As a result HVs were diverted onto secondary roads. Consequently, the toll for HVs was suspended and the concessionaire received large compensation.



*(photo credit: Ian Heggie)*

<sup>3</sup> [http://www.roadtraffic-technology.com/projects/a2\\_toll\\_motorway/](http://www.roadtraffic-technology.com/projects/a2_toll_motorway/)

## 9.6 Case Study 4: Canada - Highway 407 Express Toll Route

Highway 407, officially called the 407 Express Toll Route (ETR), is a toll way in North America, located in the Greater Toronto Area in Southern Ontario, Canada. It begins at the junction of the Queen Elizabeth Way and Highway 403 in Burlington, and travels 108 km east to its present terminus at Highway 7 and Brock Road (Durham Regional Road 1) in Pickering, Ontario. The 407 uses a system of cameras and transponders to toll vehicles electronically and automatically. There are no toll booths, hence the name "Express Toll Route" (ETR).

In 1999, the project was leased to a private concessionaire. The concessionaire, was a company called 407 International Inc. and is owned by a consortium comprised of the Canadian subsidiary of a Spanish company called Cintra Concesiones de Infraestructuras de Transporte (which is co-owned by Grupo Ferrovial and Australian-headquartered Macquarie Infrastructure Group) and Canadian-based SNC-Lavalin of Montreal. The company set the tolls at a very high rate; a charge at the time of (euro 0.12 km). However, the average tolls were half that figure. The concession was for 99 years and there was no government control of the tolls. For example, after the agreement was signed, the company increased the tolls by 200 percent at peak hours. Attempts to change the contract failed. According to reports at the time, an arbitrator declared that the Ontario highway operator could charge any tolls it liked. Moreover, in a comment on the court ruling the company declared that it could change the toll without first obtaining the government's approval although the government claimed that in order to increase tolls, the company should have filed a 'change request'.



Photo Credit: onthighways.com

The Transportation Minister in the Province of Ontario at the time, Harinder Takhar, believes that the 99-year lease is so extreme that no one could reasonably expect unfettered rights to last so long. "It's inconceivable that any government would have given a private consortium the unfettered right to raise tolls for 99 years". While the contract allowed the provincial government to "renegotiate" the contract with 407 ETR every five years, there was no obligation on the company to agree to any changes - or to restrain itself from demanding exorbitant compensation if it did.



## 9.7 What Went Wrong?

9.7.1 From examining the cases above, there are four immediate factors contributing to what went wrong in the PPP road projects.

(i) **The government not doing their due diligence.**

- The Hungarian case study demonstrated this, where the traffic projections did not match the development of the motorway.
- The Czech Republic case study also demonstrated how the government did not conduct any feasibility studies prior to contracting the private consortium.

(ii) **Risks were not properly allocated between the public and private sector.**

- The Polish case demonstrated this first hand, where centrality of risk was missing in the PPP project.

(iii) **Concession agreements did not properly regulate toll levels.**

- This was demonstrated in the case from Canada, where the consortium had all the control over the toll rates.

(iv) **Lack of additions or plan to deal with possible failures and no mechanisms to share excessive profits.**

- All four case studies have illustrated the necessity of failure mechanisms in PPP projects.

9.7.2 In addition to these immediate causes, there were also underlying causes to these problems. One of which was inadequate capacity within the public sector at both central and sector levels. In the Czech Republic it appears that the Ministry of Transport was not directly involved in the negotiations. There was an acute shortage of qualified and experienced staff for project preparation and too few staff to supervise ongoing concession agreements.

9.7.3 At the same time luck also plays a part. The Hungarian project was unlucky as it was launched just before a sharp decline in the economy which affected the population's capacity to pay the new tolls.

## 9.8 How Can We Avoid These Problems?

(i) **The public entity needs to recognize the private sector interest is a return on equity**

- There has been a misconception amongst governments that the private sector is “giving these assets to them at no risk and at no costs”, but this is untrue.
- (ii) **There is a need for a sufficient amount of qualified staff to carry out the following tasks:**
- Prepare projects and bid documents
  - Supervise the bidding process
  - Negotiate contracts
  - Monitor implementation and ongoing operation
  - The public sector staff should be assisted by external legal, technical and financial advisers with specific experience in PPPs from the outset.
- (iii) **Use a simple selection process that emphasizes experience and financial consistency.**
- (iv) **Build your own financial model to:**
- design projects and prepare bid documents
  - evaluate bids and negotiate contracts
  - inform subsequent changes in scope
  - explore possibility of excess profits & design mechanism for sharing gains
- (v) **Financial model used to determine “value-for-money” before final bidding phase**
- (vi) **Government must have capacity to deal with failure and prepare rescue package**

9.9 **Lessons Learned:**

- 9.9.1 Some projects should not be started as PPPs. In the cases mentioned above, there was too little traffic or high risks, and thus the weakness in the base case meant that such projects were basically not feasible to be launched as PPPs.
- 9.9.2 There needs to be considerable effort spent in checking the levels of the toll to ensure that they reflect the ability of the clients to pay.
- 9.9.3 It is important as well check the costs and traffic forecasts for optimism bias.

## 10. POLITICAL WILL

- 10.1 Political will is a key success factor for public private partnerships. Having the top level of a government behind the program is an essential component of delivering a successful PPP program. Typically what is needed is a high-level “champion” to lead the process within the government.

### **What is political will and why is it critically important in PPP?**

As can be seen from this comment on the Czech Republic, Mr Sloup of the Czech PPP Association believes the lack of political will in his country is the main reason why PPPs have not been successful:

*“The first and probably the main reason, why the PPP projects have not been successful in the Czech Republic so far is the lack of political will. “When someone is standing behind the project, then it works,” says Vladimír Sloup, chief executive officer of PPP Association. He mentions, as one of the positive examples, the project of Prague Central Military Hospital (ÚVN). According to the time schedule, building works should be launched this year. The lack of political optimism is a paradox, though. When people started to talk about the co-operation of public and private sectors, all political parties were excited about the co-operation of the state and private companies. The concession bill was adopted in year 2006, Ministry of Finance founded the PPP Centre, which serves as consultant for the public sector and the PPP Association has been operational since the year 2004. This association consists of private companies. “My opinion is that PPP projects are relatively long-term projects and that politicians are usually interested in their 4-year term in the office. They prepare something, but they are afraid that the rewards of the successful project would be collected by someone else,” Sloup says.*

## 10.2 A Clear Government Commitment

- 10.2.1 In addition, the need for a clear government commitment and a designation champion is key. The private sector will expect the government to be a competent partner in meeting its obligations in terms of policy and reform planning, project development and contract oversight. Moreover, the expectation will be that the government has the appropriate frameworks in place; in order to set targets and to monitor and evaluate the progress of the PPP project.
- 10.2.2 The government can show their commitment and ‘political will’ through various mechanisms. One of which is to present a clear road map that will help to manage the expectations of all parties involved in the PPP project. In addition, the government can demonstrate their commitment through stakeholder consultation, transparency of process and through the provision of a powerful champion, or driver of the process.
- 10.2.3 A good example of the effectiveness of having a clear champion can be seen in the financial close of the Hudson Transmission Line project in the USA. The project encountered various delays due to permitting, it was not until a key champion of the project, New York

Governor Andrew Cuomo was elected that the project gained momentum and achieved financial close 7 years after being put to tender.

### 10.3 Designate a PPP Champion

10.3.1 This 'champion' is a person or a unit within the government that will be accountable for progress of the PPP project and acts as a focal point for public relations. In this regard in order to sustain political will it is not sufficient to have just political leaders supporting the PPP. **There must be broader acceptance of the PPP model.**

10.3.2 The government will be able to garner public support for the PPP and future projects through demonstrating results – in terms of improved service and reasonable costs as well as through advocating for a process that is accountable to the people. It is therefore important in PPPs to **put people first**. If the constituents of political leaders are supportive of the model, then their political representatives will be more ready to give political support to the PPP programme.

### 10.4 Establish a PPP Infrastructure Fund

10.4.1 Another way for Governments to strengthen support for PPP and to provide clear evidence of their commitment for PPPs is to establish a PPP infrastructure fund. A recent report into PPPs in Qatar<sup>4</sup> recommended that establishing a PPP infrastructure fund would strengthen the financial delivery of projects and serve to "streamline activities, provide a clear direction, develop a deal pipeline and [aid] political support."

### 10.5 Make PPP's more Accountable

10.5.1 **Question:** How can the PPP model be made more accountable to the interests and desires of ordinary members of the public?

**Answer: The Manchester Example:**

10.5.2 The Manchester School Project is one of the most expensive in Europe taking place in Manchester, U.K. The school has been designed with state of the art technologies and a commitment to lifting standards in education and community development. The aim goes beyond 'bricks and mortar' to achieve local social and economic regeneration. Such a project for example, innovatively puts community development as an outcome – the school is kept open after school hours to serve the community as a whole and local community leaders are put on the school board - so that no longer is the outcome defined as 'greater efficiency' on time or to budget delivery.

10.5.3 Determining whether the integration of the community was a success was done through measuring whether there was vandalism. If there was no vandalism on the premises, it would demonstrate that there is community ownership and acceptance.

<sup>4</sup> Study compiled by Markab Advisory and sponsored by the Qatar Financial Centre (2012)

10.5.4 The Manchester example illustrates that for PPPs to be sustained people need to be brought into the action and development of the project.

## 10.6 **Gaining support for a PPP project from the public as an electorate**

10.6.1 Often, an upcoming election or a change in political control will end a PPP project, and the industry is wary of this risk. A PPP project with the support of the public is more likely to survive a change in government and lead to increased political support from politicians.

10.6.2 A study in Canada found that the public were willing to support PPP projects in healthcare<sup>5</sup> provided that the following were true:-

- (a) access to services did not change;
- (b) the quality of the services did not decrease; and
- (c) the cost to the individual was no greater than if the government had provided the service.

10.6.3 It is frequently the case that all of the above would be true in a PPP project, and yet poor communication and engagement with the public from an early stage means myths about a project become commonly held misconceptions.

10.6.4 Governments should work with their partners to establish a communication strategy for their PPP projects to gain public support. A successful communications strategy should predict the key criticisms of a PPP project (such as a view of lack of accountability, lack of transparency in the bidding process or a perception of a decreased level of service) and answer them before they can become a universal fallacy.

## 10.7 **Conclusion**

- Political will has often been associated with supporting political elites in society, however to sustain political will in support of a PPP project it's important that local communities and the main beneficiaries of PPP projects are engaged and the projects are made accountable to serving their interests.
- In this way, the projects will gain political support from these people as electors and will therefore in turn induce greater political support from politicians in a society.

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<sup>5</sup> The Canadian Council for Public-Private Partnerships, "The People Speak on P3," note 11, p. 7.

## 11. KEY LESSONS AND RECOMMENDATIONS

### 11.1 Partnership

- Adopting a PPP scheme is not easy. The model is not easy to apply to infrastructure projects due to their complexity, the nature of contractual arrangements and the high level of uncertainty that arises from the long concession period.
- To ensure the success of a PPP project, both the government and the concessionaire must be fully competent to implement the partnerships.
- It is critical that governments are capable of adequately defining the most appropriate output specification in a PPP contract.
- The output specification is the measurement by which the private sector partner is assessed. Accordingly, it is important that there are properly defined performance monitoring mechanisms that can evaluate whether the private partner has properly complied with the contractual conditions.

### 11.2 Funding PPPs

- PPPs offer a high value added alternative to traditional public procurement, the latter being funded by the tax payer.
- Fiscal sustainability: one has to be cognizant about the degree of liability that one brings on board with PPP projects.
- There is a fiscal sustainability risk by both local and regional governments and authorities attempting to service the debt from their PPP project. The acquisition of such debt, and depending on its size, may severely constrain their expenditure flexibility in the future and for future generations.

### 11.3 Rationale

- Governments are using PPPs for increasingly different reasons rather than for the exclusively all important budgetary reason as in the past.
- Efficiency reasons have become more salient than budgetary reasons, while other rationales are becoming increasingly used, such as the contribution of PPPs to sustainable development and in mitigating the effects of climate change.

#### 11.4 Effective PPPs

- Effective PPPs are when risk is shared equitably between the various partners.
- There is frequently a misunderstanding about risk transfer in PPPs. PPPs are not devices for governments to develop infrastructure projects by transferring all the risks to a private partner, rather it requires a clear consideration of these risks and how they are allocated between the public and private sectors.
- All potential risks of the project should be identified and risk allocation should be secured.
- Governments and private sector are translating their different interests in projects to develop partnerships that are more effective in sharing risk. Overall, the government sector takes on those risks that can be categorized as political risks while the private sector assumes the risks belonging to the actual project, with those that cannot be categorized as either 'political' or 'project', being shared between the two parties.

#### 11.5 Project Life Cycle

- A successful PPP requires the government to select a suitable concessionaire and to be actively involved in the whole process of the project (that is, the whole lifecycle of the project) to ensure quality and efficiency of the project.
- There is a need for a central PPP unit to foster overall coordination of the PPP programme (especially where the coordination of different ministries is required).

#### 11.6 Political Will

- Political will is critically important in order to support the PPP programme within the government apparatus.
- Political will is often associated with the very top levels of government. However for real sustainability it is important that ordinary members of the public are properly engaged in PPPs. If they are involved, this can generate the political support for PPP amongst their elected representatives. A project having such political support over the term of a project can help to prevent arbitrary intervention by the government into the running of the project and the changing of the agreement. Thus, the people as well as the political leaders are important in generating sufficient political will for a PPP.

## 11.7 Recommendations for Public Sector

- 11.7.1 Identify and prioritize pilot PPP projects – and be aware that a PPP may not be appropriate for all infrastructure projects. The Government should conduct a comprehensive feasibility study to examine the applicability of the PPP approach to a specific infrastructure project before its implemented.
- 11.7.2 Additionally, Governments should undertake properly the various phases in a PPP project life cycle and begin with the preparation of a business case and assessment of value for money and the project strengths and weaknesses.
- 11.7.3 The Government should standardize its procurement process, provide general and/or specific industry and sector guidelines. A standardized tender document and model contracts for a range of infrastructure sectors is also necessary. Such measures can significantly reduce not only tendering costs to the private sector, but also the tender evaluation costs to the public sector. Furthermore, the negotiation time can also be shortened.
- 11.7.1 In order to facilitate a solid foundation for PPPs, Governments, when putting into place the necessary foundations to enable PPPs, should follow principles of good governance.
- 11.7.2 Provide training at all levels for Government staff. The successful implementation of PPP required its participants to possess diverse skills and expertise in procurement, legal and financial management. Therefore, the Government should provide training in these areas to its employees, especially those at regional and local levels. This training can be undertaken under the auspices of a central PPP Unit.
- 11.7.3 Develop a PPP database of case studies. A database of historical information on PPP projects in the country and elsewhere, successful and not so successful can be very useful in selecting a suitable infrastructure project for PPP and avoiding similar mistakes in the future. Data stored in this database should include project background information, concessionaire selection methods and criteria, and project performance. The database should also include information on various types of PPPs throughout the world, and it should allow users to retrieve information on the basis of sector and the regions where projects are located.

## 11.8 Recommendations for Private Sector

The private sector should share its knowledge and expertise with the Government in creating PPP-related policies and a favourable investment climate.



12. **ABBREVIATIONS**

SPV	Special Purpose Vehicle
D&B	A design and build contract
BOT	Build, Operate and Transfer
BOOT	Build, Own, Operate, Transfer
DBOOT	Design, Build, Own, Operate, Transfer
BRT	Built, Rent, Transfer
R&D	Research and Development
NPV	Net presents Value
HVs	High Vehicles



# UNECE

## *Capacity-building programme on public-private partnerships*

### TRAINING MODULE

**"INTRODUCTION TO PUBLIC-PRIVATE PARTNERSHIPS: CAN PUBLIC PRIVATE PARTNERSHIPS IMPROVE INFRASTRUCTURE AND DELIVER BETTER PUBLIC SERVICES?"**

#### Learning Outcomes

This training module provides a basic understanding of:

- how PPPs differ from traditional procurement;
- how financing in PPPs differs from traditional financing techniques and the implications of this;
- why Governments choose PPPs to improve infrastructure and the delivery of essential services;
- how to make PPPs successful through effective risk allocation;
- the different stages of the PPP lifecycle;
- good governance in PPPs;
- how projects could go wrong and a how to anticipate and prevent such occurrences; and the significance of political will and how it can be sustained.

