

PPP Basics and Principles of a PPP Framework

This note is the first in a series of notes on developing a comprehensive policy, legal, and institution framework for public-private partnership (PPP) programs. This series is extracted from a PPIAF-funded analysis of Uganda's enabling environment for PPPs, which was prepared by Castalia Limited in December 2008.

PPP Basics

PPPs are a concept that has been applied to a range of types of agreements between public and private entities. There is considerable confusion and difference of opinion among stakeholders as to what exactly constitutes a PPP. Herein we provide some context and lay the foundation for developing a PPP framework by defining PPPs in infrastructure. We then summarize the advantages of using PPPs to provide infrastructure services and discuss the principles behind developing a PPP framework.

Defining PPPs in Infrastructure

There is no single, internationally-accepted definition of a PPP. The term is used to describe a wide range of types of agreements between public and private sector entities, and different countries have adopted different definitions as their PPP programs evolved. Nonetheless, these definitions are centered on a common understanding of a PPP as a long-term contract between a government and a private entity for provision of a public service. The ambiguity of the term "PPP" leaves a lot of room for misconception and can result in widely differing interpretations.

Box 1.1: Clearing up PPP Misconceptions

- **PPPs mean full cost recovery from tariffs:** a PPP must generate a revenue stream that allows the private party to fully recover its costs. This revenue stream can be from user charges, such as freight or passenger charges in the case of a railroad concession. It can also be from government budget allocations, such as for a long-term road construction and maintenance contract where the road is free to use. It can also be from a combination of the two, such as a water purchase agreement with a bulk water treatment plant, where the retail price of water is subsidized by government. Conceptually, the decision about how the costs of a public service should be paid is distinct from the decision to finance and implement this service through a PPP. In practice, user charges may be politically and practically easier to introduce with a PPP; nonetheless, subsidies can be provided so full cost recovery from users is not required.
- **PPP means the government is a financial partner in the venture:** the "partnership" in PPP refers to a contractual agreement between the government and the private party. It does not necessarily imply a joint venture in which the government is a financial partner. Such a joint venture may actually dilute the advantages of using a PPP, since it means the government continues to bear general project risks such as construction and operation risk that are more appropriately borne entirely by the private party.
- **PPPs transfer asset ownership to the private sector:** PPP contracts are for a fixed, finite term. At the end of this term, control of the assets, whether pre-existing or new, reverts to the government. In the case of assets created during the PPP, this may require payment by the government to the private company of an amount equal to the asset value at the end of the contracts, as would be specified in the contract.
- **PPP is about supporting private sector development:** a PPP is a partnership between government and the private sector to provide or contribute to a public service. This is distinct from any government intervention to support private sector development in general, for example by providing land, assets, debt, equity, or guarantees to otherwise fully private enterprises; however, there may be occasions where both objectives could feasibly be pursued.

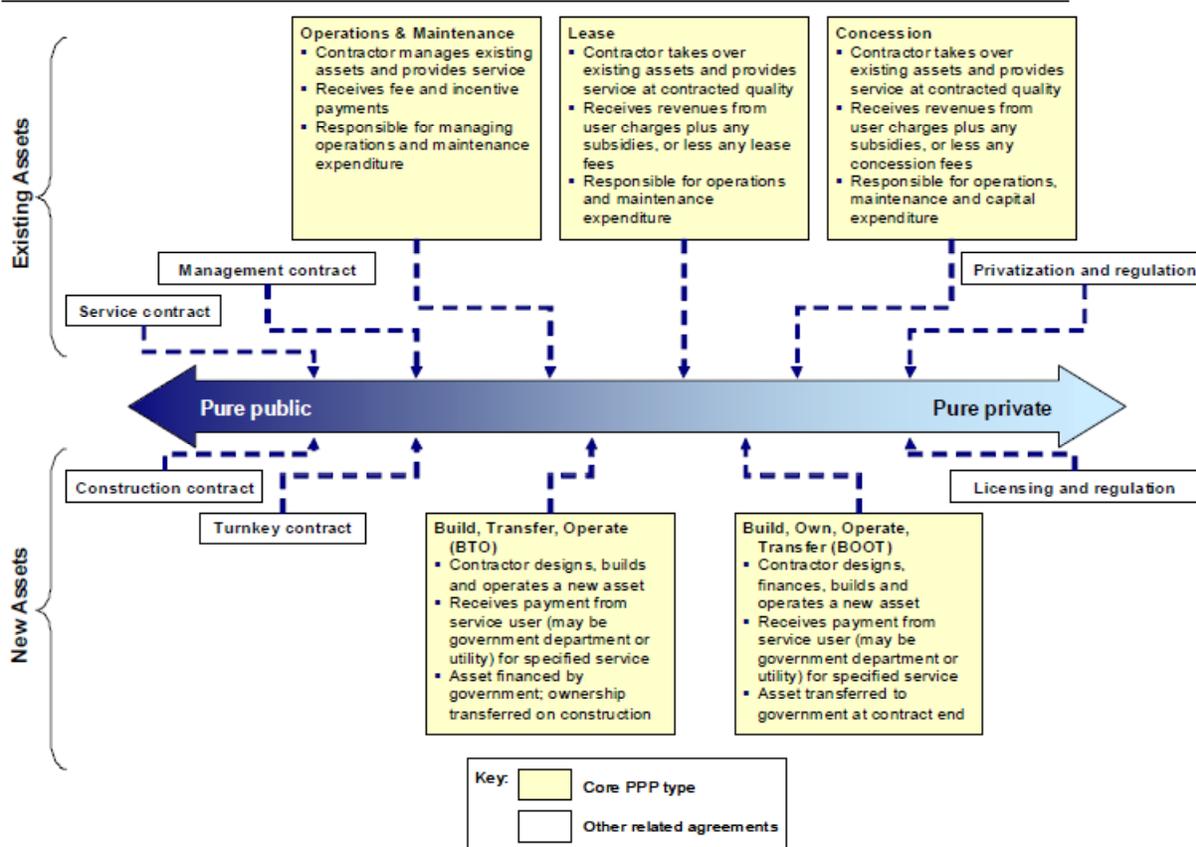
An effective PPP framework must be based on a common understanding of the meaning of PPP. The simplest way to define a PPP is to specify the set of core attributes that are common across international definitions. These attributes are:

- A long-term agreement between a government entity and a private company, under which the private company provides or contributes to the provision of a public service
- The private company receives a revenue stream—which may be from government budget allocations, from user charges, or a combination of the two—that is dependent on the availability and quality of the contracted service. The agreement therefore transfers risk from the government entity to the private company, including service availability or demand risk
- The private company must generally make an investment in the venture, even if it is limited, e.g., to working capital
- In addition to budget allocations, the government may make further contributions, such as: providing or enabling access to land; contributing existing assets; or providing debt or equity finance to cover capital expenditures. The government may also provide various forms of guarantee that enable risk to be shared effectively between the government and the private company
- At the end of the PPP contract the associated assets revert to government ownership

Figure 1.1 below shows a range of types of agreements which can be characterized as ‘core’ PPPs—those which display all the attributes listed above. These include concession or lease contracts involving existing assets, along with build-operate-transfer and related contract types for developing new assets. There are a number of other types of agreements which could, by dropping one or more of the above attributes, be considered as PPPs, and which are included in some PPP definitions. One example is a management contract, in which the contractor may not make any investment and may accept a limited amount of performance risk.

Some aspects of this PPP definition are also open to interpretation. For example, governments may interpret ‘long-term’ differently—typical definitions are at least five or ten years. Similarly, governments may differ in their definition of ‘public services’—generally, meaning services the government considers in the public interest to have provided.

Figure 1.1: Examples of “Core” PPP Contract Types



Defining infrastructure

One approach to defining infrastructure is to specify common attributes of infrastructure provision. In general, infrastructure means the “basic physical and organizational structures and facilities needed for the operation of a society or enterprise”¹. The term is most commonly applied to mean “national infrastructure”, or the physical assets and basic services that make economic activity possible. In this case, typical attributes are:

- Provision of a basic service—that is, one that is necessary to make economic activities possible and is not readily substitutable
- Part of a system or network developed and maintained over a long timescale
- High capital costs and economies of scale
- High sunk costs—assets are purpose and location-specific.

PPPs may also be used to provide “government infrastructure”, or the physical assets and basic services that make government activity possible. Government infrastructure provision shares most of the attributes listed above—provision of a basic or underlying service, high capital costs, and high sunk costs—but at the scale of supporting government activity, rather than economic activity in general.

¹ Oxford Dictionary of English

For policy purposes, a clearer and more practical way to define infrastructure is to list the relevant sectors. Based on the characteristics listed above, the following sectors clearly fall under national infrastructure:

- Power
- Water and sanitation
- Transport fixed assets—roads, bridges, railroads, ports, airports
- Telecommunication networks—local loop, exchanges, and backbone.

Other sectors, services, or assets that could fall under infrastructure by relaxing some of the attributes outlined above include:

- Public transport systems such as bus networks, rail rolling stock, and ferries
- Business support assets such as industrial parks or irrigation systems
- Urban services such as street lighting and solid waste disposal.

Government infrastructure may include:

- Physical buildings from which government services are provided, such as offices, prison buildings, hospital buildings, school buildings—often collectively called “government accommodation”
- Intra-government communication networks such as telephone or IT systems.

Examples of PPPs in infrastructure

Combining the definition of PPP above with the definition of infrastructure can generate some examples of what a PPP in infrastructure or infrastructure services could be:

- A railroad concession in which a private contractor takes over control, operations, maintenance, and capital expenditure of a government-owned railway track system, pays a concession fee to the government, and has the right to charge users
- Private development of a new generation asset based on a power purchase agreement with a government-owned single buyer
- Road construction and maintenance contracts, in which a contractor is paid by the government to provide a road in a specified condition over a certain period
- Prison construction, maintenance, and service contracts, in which a contractor is paid by the government to provide a prison facility and certain building-related services such as heating and plumbing, to specified standards over a certain period.

Advantages of PPPs

PPPs provide an alternative source of finance to traditional government borrowing. This finance is typically more expensive than concessional loans from multilateral and bilateral institutions, but may help increase investment in infrastructure if the government is otherwise finance constrained. Where PPPs are paid for in full or part by user charges, the total funds available for providing infrastructure also increase—effectively by introducing a targeted tax on service users.

Besides potentially expanding the finance or funds available for infrastructure investment, using PPPs can improve the outcomes of this investment. The real benefits of PPPs can include improved value for money, sustainability, and accountability for government investment in infrastructure over traditional

public procurement. Most of these benefits arise from a crucial feature of PPPs—the ability to efficiently allocate risk between public and private parties.

PPPs can achieve better **value for money** than traditional public procurement through:

- **Risk transfer and efficient allocation:** PPPs relieve the government budget of some project risks, while efficient risk allocation between parties improves incentives and should reduce overall project cost, as described in Box 1.2 below
- **Whole-of-life costing:** a single contract spanning the design, construction, and operation of an asset gives the operator an incentive to strike the efficient design balance between capital costs on sound construction and the expected level of operation and maintenance costs over time
- **Harnessing private sector expertise:** involving a private sponsor throughout the transaction structure and design process may allow the government access to that sponsor's international experience in innovative technology or financial structures.

Box 1.2: Allocating Risk in PPP Agreements

PPPs allow risks to be allocated more efficiently than if the infrastructure were developed and operated completely either by the government or by the private sector. Best-practice principles of risk management suggest risks should be allocated to the party best-placed to manage or absorb them. That is, risk should be allocated to the party best-placed to:

- Influence the risk factor, where possible
- Influence the sensitivity of total project value to the risk factor—that is, to anticipate or respond to risk factor, if it cannot be influenced directly
- Absorb the risk, where it can neither be influenced nor its impact controlled²

When the party that can manage a risk also bears its cost, it faces a strong incentive to do all it can to manage or reduce the impact of the risk. For this arrangement to be effective, the party to which a risk is allocated should also have control over decisions related to the risk factor. For example, the party that bears construction-related risks should be able to select the construction materials and techniques to be used.

A PPP allows effective risk allocation because there are typically some risks the government can best control or absorb, and some that can be managed best by the private party. The government may accept some demand risk, through take-or-pay agreements or minimum revenue guarantees, because it often controls the existence of competing services. For example, the government controls the contracting of further electricity generation plants, or competing toll roads. The government is also best-able to control land acquisition, so typically guarantees the availability of suitable sites.

The private party, in turn, is best-placed to manage construction, commercial, and operating risks. The private sponsor may pass these risks on to its sub-contractors—for example, a construction company's contract typically includes penalty clauses for late completion that compensate the sponsor for the delay in revenues. Some risks, such as land or soil quality, or *force majeure* risks, cannot be readily controlled or mitigated by either the government or private party. These risks may be accepted by the private party and insured against, where possible. Otherwise, the parties may simply share and absorb such risks.

² Irwin, Timothy C. *Government Guarantees: Allocating and Valuing Risk in Privately Financed Infrastructure Projects*. Washington, D.C.: The World Bank. 2007

A second benefit of PPPs is to improve the **sustainability** of public services. In addition to reducing overall cost, PPPs can greatly decrease the variability of the cost of that service to government. This decreases the vulnerability of the service and of the government's fiscal position to unexpected shocks. This benefit arises directly from sharing the risks of service provision with the private party—provided, of course, the private party is sufficiently competent to manage the risks and responsibilities allocated to it through the PPP contract.

Introducing private investment also greatly increases the incentives and capacity to accurately identify project risks upfront. Investors whose profits depend on a successful project will undertake rigorous due diligence on PPP contracts to ensure risks are identified, appropriately allocated, and mitigated where possible. Hence even where the government does bear risk, it is likely to be better understood and specified through contracts and associated guarantees than under traditional public procurement. This enables the government to choose to make appropriate provisions, such as credit lines or regular budget allocations, to protect the budget from shocks should guarantees be called.

Finally, PPPs also improve **accountability** in public expenditure through transferring service delivery risk to the private party. This means the government only pays for services delivered at the specified quality over the contract period. This is in contrast with traditional public procurement, where the government often has no recourse when, for example, construction quality is revealed after the event to be lower than expected.

When PPPs are used for the right projects, the benefits in terms of value for money, accountability, and sustainability of public investment in infrastructure can be substantial. These benefits are difficult to measure. Audits of PPP programs in the United Kingdom (UK) and Australia do nonetheless suggest that PPP projects result in lower costs, and delivery is more likely to be on time and on budget. For example, a 2003 audit of the Public Finance Initiative (PFI), the UK's PPP program, found that of a sample of PFI projects, 78% were delivered on budget, and 76% were on time, compared to 27% and 30% respectively for non-PFI construction projects.³

However, not all projects can be effectively delivered using a PPP. The benefits of PPPs mainly arise from the ability to efficiently allocate risk between public and private parties. To effectively allocate risk, project outputs must be clearly specifiable for the duration of the project. This means PPPs work best for projects that are not subject to significant uncertainty or change in outputs or conditions. For example, PPP projects in the IT sector can be difficult as the technological change is simply too rapid in relation to the typical length of a PPP contract. Since achieving an efficient risk allocation requires investment of time and money in project structuring, PPPs may not be cost-effective for small projects, even if the other project characteristics are well-suited to a PPP contract.

Principles of a PPP Framework

A “PPP framework” is the combination of policies and laws that define how and when PPPs can be used to deliver public services. It includes the institutional responsibilities, rules and procedures for developing and implementing PPPs.

Different countries have developed and refined their PPP frameworks for a variety of reasons, as illustrated in Box 1.3 below. The aims of such frameworks typically include promoting the use of PPPs where appropriate—that is, for suitable projects and for the right reasons. Institutional responsibilities and rules are defined to ensure:

- Projects that address policy priorities and have that potential to be implemented through a sustainable PPP are identified
- PPP projects are pursued when they represent value for money

³ National Audit Office, UK, “PFI: Construction Performance”, 2003

- PPPs are not used as a way to circumvent fiscal constraints or the budget process.

PPP frameworks generally also aim to **improve execution of PPP projects**. Institutional responsibilities, rules and procedures aim to ensure:

- PPPs are well-structured, with risks allocated appropriately
- PPPs are procured at minimum cost, given this structure—for example, by ensuring procurement is competitive and attracts as many bidders as possible by structuring projects up-front, and providing this information to potential bidders
- PPPs are developed and implemented efficiently—for example, by reducing the complexity of coordination between government agencies, and by achieving the appropriate balance between in-house expertise and external advisory capacity.

Box 1.3: International Reasons for Establishing a PPP Framework

South Africa formalized its PPP framework and established a PPP unit with a particular focus on ensuring consistency with budget priorities. This was prompted by the procurement through a PPP of a new prison by the Ministry of Public Works. While the prison PPP offered value for money in comparison with public procurement, the PPP contract would have pre-committed resources the Ministry did not necessarily have. Assessment of new PPP projects now places a heavy emphasis on consistency with the budget priorities and allocations of the relevant government entity.

In **South Korea**, the PPP framework placed more emphasis on promoting, rather than controlling, PPPs. The slow progress of the PPP program during the mid-1990s was attributed to a lack of transparency and insufficient capacity and expertise in PPP procurement and development. The Private Infrastructure Investment Center of Korea (PICKO) was created specifically to address these problems. It provided technical support to PPP development, standardized procedures and guidelines for PPPs, and promoted and educated the government and private sector about PPPs in Korea,

To achieve these aims, the government needs to play a leading role throughout the process of developing and implementing each PPP. Figure 1.2 below illustrates the five stages of PPP development and implementation. For each stage, it summarizes the functions the government should perform. It then identifies the policies, responsibilities, rules, and procedures that need to be defined to ensure the government is performing its functions. Together, these policies, responsibilities, rules, and procedures form the PPP framework.

The actual nature of the PPP framework developed in any country depends on the prospective PPP program, experience with PPPs, and relevant existing institutions and laws.

Figure 1.2: Stages of PPP Development and Components of a PPP Framework

Stage of PPP Development and Implementation	Government Role	Necessary policies, responsibilities, rules and procedures
Stage 1: Set PPP Strategy	<ul style="list-style-type: none"> Define aims of PPP program State priority sectors for PPPs and types of PPP contracts Define what government may contribute to PPPs 	<ul style="list-style-type: none"> Central PPP policy statement Defined principles for project structuring, risk allocation and options for government support—may be set in a central PPP policy and interpreted at the sector or project level
Stage 2: Identify project	<ul style="list-style-type: none"> Identify potential project from among sector priorities Conduct pre-feasibility study Build initial business case based on proposed project structure 	<ul style="list-style-type: none"> Mandate to relevant government entities to consider PPPs—from central PPP policy Capacity within—or support to—government entities to identify projects with PPP potential and develop business plan System for dealing with unsolicited proposals
<i>Evaluate project</i>	<p>Asses whether project is:</p> <ul style="list-style-type: none"> In line with policy and budget requirements? Economically viable? Technically and financially feasible? Offering value for money versus other implementation options? Well-structured? 	<ul style="list-style-type: none"> Defined responsibilities for evaluating and approving proposed projects Defined evaluation criteria, such as definition of “value for money” and acceptable risks—may be laid out in central PPP policy Defined methods to evaluate budget impacts, for example the cost of providing guarantees
Stage 3: Develop project	<ul style="list-style-type: none"> Conduct detailed feasibility study Design detailed project structure and create proposed set of contracts 	<ul style="list-style-type: none"> Defined responsibility to manage project development process Capacity to undertake feasibility study and develop set of contracts Model contracts and documentation
<i>Evaluate project</i>	<ul style="list-style-type: none"> Re-assess project—has structure changed since previous evaluation? Approve the government’s budget commitments, if necessary 	<ul style="list-style-type: none"> Defined responsibilities and criteria for re-evaluating proposed projects Defined process for approving government’s budget commitments—should be consistent with public financial management processes
Stage 4: Manage transaction	<ul style="list-style-type: none"> Issue tender notice with pre-qualification criteria Select short-listed bidders Issue request for tender and project documentation Respond to bidders’ queries Receive and evaluate bids Notify and negotiate with the winning bidder; sign contract 	<ul style="list-style-type: none"> Clearly defined procurement process Defined responsibility, and capacity, to manage transaction
Stage 5: Monitor Contract	<ul style="list-style-type: none"> Ensure private party fulfils its contractual responsibilities Apply agreed remedies or penalties if private party fails to meet contractual responsibilities 	<ul style="list-style-type: none"> Clearly defined monitoring process Defined responsibility, and capacity, to monitor contracts Defined processes and responsibilities for dealing with contract disputes