

## **A brief introduction to Public-Private Partnerships**

### **Introduction**

In the last few decades it has become normal that Governments in both industrial and developing countries use Public-Private Partnerships (PPPs) to confront the challenge of meeting a growing demand for new and better services. Available funding from traditional budgetary sources and institutional capacity in the public sector to design and implement projects remain limited, particularly for infrastructure and expansion of public utility services. Therefore, governments have found that partnership with the private sector is a convenient option to increase funds and improve quality in the supply of those services. Private participation has been increasing all over the world and a large variety of sectors are currently serviced by means of PPP contracts. In such contracts the involved parties, a public institution and a private organization, jointly share responsibilities and confront risks for the design, construction, implementation and management of the operation and maintenance of the projects.

### **What is a PPP?**

There are many characterizations of public-private partnerships, usually adapted to the institutional environment to which they are applied. A rather broad definition is that proposed by the PPP Knowledge Lab, a group of multilateral development organizations that define a PPP as a *long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility and the payout is linked to performance.*

Hence, it is a contract between a public-sector institution and a private party, where the private party performs a function that has been usually provided by the public-sector. In addition, it uses public property or is authorized to use already built public infrastructure for providing services. But more importantly, it bears part of the technical, financial and operational risks derived from the provision of services and provides knowledge and expertise to improve the quality and reliability of those services. It is not just a source of infrastructure financing; it should also be a method for providing long term benefits in competitiveness, efficiency and affordability of those services.

### **Differences with other forms of public procurement**

In PPPs the private party performs a function that is usually provided by the public-sector and uses public property in terms of the PPP agreement. Most of the project risks (technical, financial, operational and commercial) are transferred to the private party. In a traditional government project, the public sector pays for the capital of new infrastructure, operating costs for maintenance and facility management and bears the risks of cost overruns, technical or commercial problems and late or incomplete delivery. In PPPs the risk allocation between the partners is crucial to the contract design and is more multifaceted than that of a conventional construction project. Both partners should clearly

understand the various risks involved and agree to share between them according to the abilities to mitigate and control the different aspects during the life of the project.

However, one of the most important differences refer to how infrastructure projects are financed. Projects, in the traditional model, have been financed fully by governments. Usually they borrow most of the funds necessary to design and build project and use bank lenders (domestic or international banks), multilateral or bilateral financial institutions, or capital markets by way of debt issuance to provide those resources. A fundamental feature of such model is that lenders require and are granted sovereign guarantees by governments for the repayment of the loans and bonds. The over-use of this scheme has put great stress on public budgets, created additional risks and volatility in financial markets, reduced the incentives for efficiency and performance in the delivery of the services and eventually limited the availability of resources to meet the increasing demand for infrastructure services.

Another important difference with the traditional infrastructure model is that, under PPP projects, the focus should not be on delivering a particular class/type of assets, but on delivering specified services at defined quantity and levels of quality. Here, the international experience that the private sector can bring to the table is quite relevant to offer best practices and elements to assess the best value-for-money.

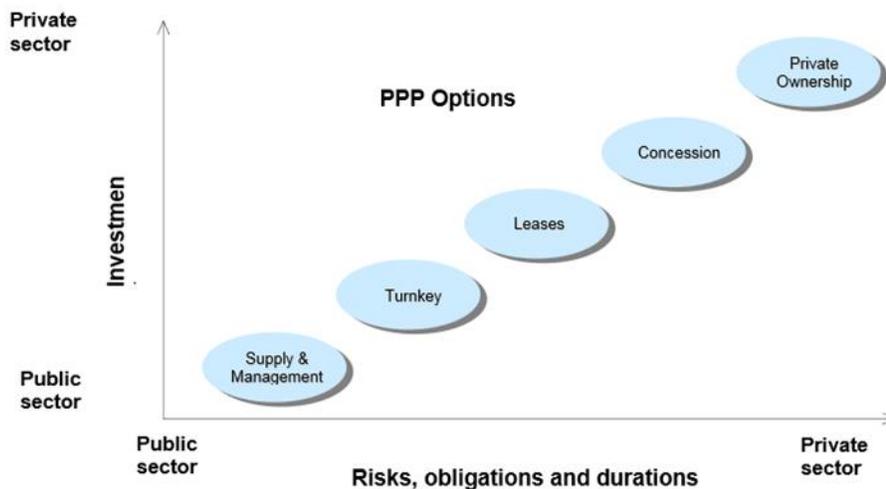
## **The PPP continuum**

There are as many models of private sector participation as different contracts are in use in different countries. Many factors define a PPP contract, with variations in the functions and stages for the private party intervention as well as on the type of infrastructure and services obtained from the asset. Those functions may include:

- **Design:** involves developing the project from initial concept and output requirements to construction-ready design specifications; it may refer to several dimensions (economics, finance, environmental, social, etc.).
- **Build:** when PPPs involve new infrastructure assets, they typically require the private party to construct the asset and install all equipment. Where PPPs involve existing assets, the private party may be responsible for restoring, revamping or overhauling the asset.
- **Finance:** when a PPP includes building or restoring the asset, the private party is typically also required to finance all or part of the necessary capital expenditure.
- **Maintenance:** PPPs assign responsibility to the private party for maintaining an infrastructure asset to a specified standard over the life of the contract. This is a fundamental feature of PPP contracts.
- **Operation:** the operating responsibilities of the private party to a PPP can vary widely, depending on the nature of the underlying asset and associated service. For example, the private party could be responsible for providing a service to a government agency (e.g., operation of a gas pipeline) or directly to users (e.g., home procurement of gas to consumers); operation is always subject to predefined levels of quality of service to which the payout is linked.

With regards to the number of roles described above that the private contractor takes on a specific contract, we can define a “continuum” with a number of different types of PPPs. The following chart shows a representation in which at the lower left corner with low level of investment and a low level of risk and obligations assumed by the private partner, the model would be a management contract (e.g. for operation and maintenance), or simply the supply of a specific service. Turnkey contracts would provide, for example, the design, the engineering and the construction, perhaps with the responsibility of financing it, with the delivery of the full asset for operation by the government agency or by a different private provider. In this model, comparing with the previous one, there is a larger investment by the private company and more risk assumed, for example in delays in construction or the engineering details. On the other extreme of this imaginary continuum, full ownership of an infrastructure services project by a private firm requires the maximum private investment and the largest risks and obligations during the servicing period.. On the middle section of this continuum appear the most common and better-known PPP models: leases, sale-leasebacks and concessions with their variations: Build-Operate (BO), Build-Operate-Transfer (BOT) and other similar combinations.

### Basic features of PPP models

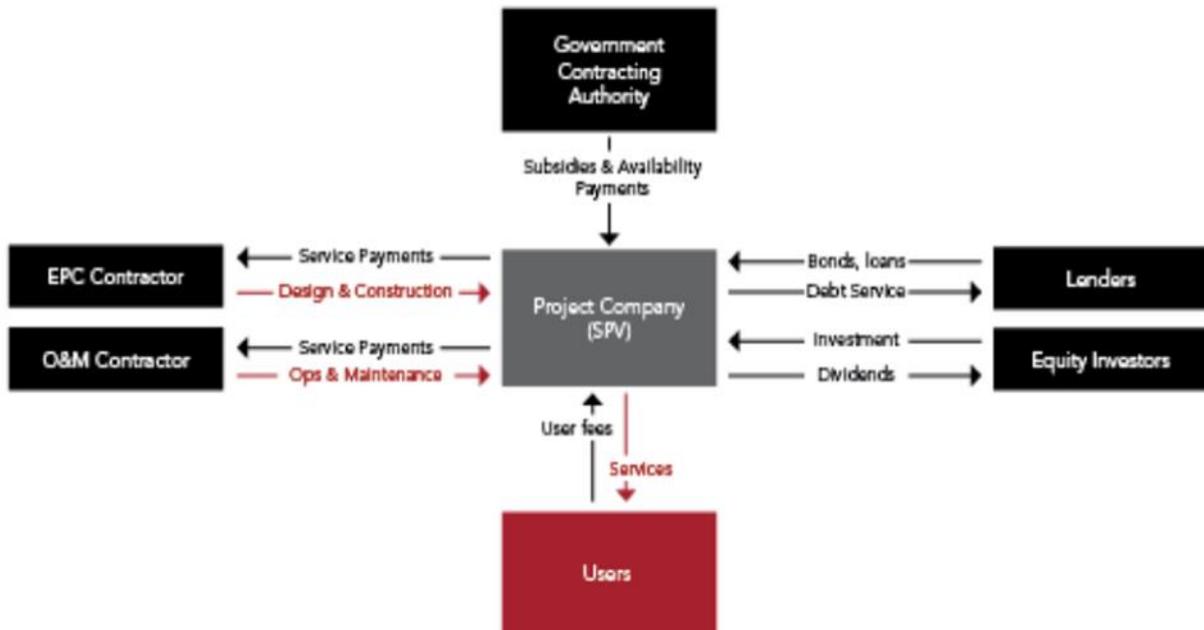


Source: [https://www.unescap.org/sites/default/files/ppp\\_guidebook.pdf](https://www.unescap.org/sites/default/files/ppp_guidebook.pdf)

### Typical PPP structure

Every PPP contract has its own special characteristics and features based on the type of investment, sector or utility that it refers to, as well as the institutional differences among countries, or even among different jurisdictions within the same country (e.g., different provinces, states or departments). However, in most cases there are common aspects that can be put on a schematic chart as the following.

### Simplified PPP structure and cash flows



Source: <https://pppknowledgelab.org/guide/sections/3-what-is-a-ppp-defining-public-private-partnership>

At the center of this chart is the Project Company, which is also known as a Special Purpose Vehicle (SPV), which is a company specially created for the purpose of serving the users by means of the infrastructure project. Another necessary participant is the Government in its role of Contracting Authority. It may be a unit of the sovereign itself, like a Ministry, or an agency, or a public corporation. And, of course, the purpose of the construction is to provide a service or a utility to customers of the SPV. In the traditional scheme of infrastructure construction and services, the Government uses budget appropriation of funds and borrows money from financial lenders to perform all the functions involved in the utility provision or delivery of service

An important aspect is the payment mechanism for the project services. Users pay for the service delivered by the SPV. In PPPs the Government may support the SPV via subsidies or with special payments as a monetary contribution for the project success. But a defining aspect is that all payments are subject to performance thresholds. This is in fact one of the most attractive incentives for both governments and users, so that net payout of the private party is linked to the performance in the provision of the service.

To perform the technical and construction functions, the SPVs utilize Engineering-Procurement-Construction (EPC) contractors. They provide design, engineering, procurement of equipment and construction of buildings, roads and other facilities needed in a particular project. The full responsibility and risks associated with these services are assumed by the SPV, although in many cases, a government agency has a role in overseeing the SPV and its contractors.

In the same manner, the SPV commissions the services of Operation and Management of the facilities during the active life of the infrastructure. This is particularly important in the case of public utilities concessions since the quality of the public service (e.g., municipal water, domestic gas, electricity) always require specialized experience from of providing the same service over the world. Here, also the governmental agency has a supervisory role. In the case of public utilities there are usually regulatory agencies, independent from the central governments that follow the implementation of the long-term contracts that ensures the public and the political bodies (Executive, Parliament, Judiciary) that supervision is being done.

The financing of the project is one of the most critical aspects of the arrangement and may involve several participants, investors, lenders, banks, bond holders, etc. It is impossible to define in abstract a unique scheme for the financial arrangement since each PPP has different characteristics and opportunities for the use of the funds. First, the sponsor company or the SPV has its equity holders, or investors who put at risk their money expecting a return. However, projects need more resources than what they invest and hence, additional money from other investors and lenders is needed. In order to attract lenders, including banks and bond buyers, convenient conditions are proposed. Among them, the “first in, last out” rule is offered, which means that losses are supported first by investors and only when there is no equity available the lenders lose their money. The condition is chosen to minimize the financial cost for the project by reducing the amount of equity investors and so attaining a larger leverage from them. As mentioned before, the particular financial conditions and arrangements of a PPP depend on the characteristics of the project, the general situation of the markets, the macroeconomics of the country and other idiosyncratic risks.

## **Our Solution**

At Sigma Capital Advisors LLC, our consultants have extensive professional experience on several key elements to consider in PPP projects. We can provide support in the pre-feasibility, feasibility and design stages on economic, financial, environmental and social dimensions. Our staff and network of associated firms and independent consultants can be active participants within PPP teams contributing to the structuring, execution and ongoing operation of the different workflow phases of the projects, addressing a wide range of issues, from economics, finance and regulation, to monitoring and evaluation.

**Orlando Reos**  
*Senior Consulting Partner*  
*Sigma Capital Advisors LLC*

## DISCLAIMER

This website and its blog is a publication of Sigma Capital Advisors LLC, a company incorporated in the state of Maryland. Information presented is believed to be factual and up-to-date, but we do not guarantee its accuracy and it should not be regarded as a complete analysis of the subjects discussed. All expressions of opinion reflect the judgment of the authors as of the date of publication and are subject to change. Information on this website and its blog do not involve the rendering of personalized investment advice. A professional advisor should be consulted before implementing any of the options presented. No content should not be construed as legal or tax advice. Always consult an attorney or tax professional regarding your specific legal or tax situation. Information on this website and blog is not an offer to buy or sell, or a solicitation of any offer to buy or sell the securities mentioned herein. Case studies are for illustrative purposes only and should not be construed as a testimonial. They do not represent the experience of any specific advisory client. Each investor situation is different, and goals may not always be achieved. It is unknown if the client approved or disapproved of the services rendered. None of the persons photographed is a current or former client of Sigma Capital Advisors LLC. These photos should not be construed as an endorsement or testimonial from them. Hyperlinks on this website are provided as a convenience. Sigma Capital Advisors LLC disclaims any responsibility for information, services, or products found on websites linked hereto. Additionally, Sigma Capital Advisors LLC is not liable for any direct or indirect technical or system issues or any consequences arising out of your access to or your use of third-party technologies, websites, information and programs made available through this website. When you access one of these websites, you are leaving our website and assume total responsibility and risk for your use of the websites you are linking to. Sigma Capital Advisors LLC is NOT registered as an investment advisor with the U.S. Securities Exchange Commission ("SEC") nor with any US state. Its owner and president is currently an Exempt Reporting Adviser ("ERA") in the state of Maryland that is not required to register as an adviser with the SEC or the state regulator, but must still pay fees and report public information via the IARD/FINRA system, and currently only transact in states where it is excluded or exempted from registration requirements. Different types of investments involve varying degrees of risk, and there can be no assurance that any specific investment will either be suitable or profitable for your portfolio. All investment strategies have the potential for profit or loss and past performance is no guarantee of future success. Historical performance results for investment indexes and/or categories, generally do not reflect the deduction of transaction and/or custodial charges or the deduction of an investment-management fee, the incurrence of which would have the effect of decreasing historical performance results. Economic factors, market conditions, and investment strategies will affect the performance of any portfolio and there are no assurances that it will match or outperform any particular benchmark.