

CDIA PPP Guide for Municipalities
June 2010

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CDIA is a multi-donor Programme established in 2007 to assist medium sized Asian cities to bridge the gap between their development plans and the implementation of their infrastructure investments. CDIA uses a demand driven approach to support the identification and development of urban investment projects in the framework of existing city development plans that emphasize with focus on environmental improvement, pro-poor development, good governance, and climate change.
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# CDIA PPP Guide <br> for Municipalities 

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## INTRODUCTION

## BACKGROUND: Confronting the urban challenge

Faced with rapid urban growth, city governments throughout Asia and the Pacific are increasingly being called on to improve urban services. No matter their size, from smaller provincial capitals to sprawling megacities, urban areas must rapidly respond with strategic investments in new and improved infrastructure to serve the needs of their citizens. These include water and sanitation systems, solid waste management facilities, energy supply and distribution, mass transit systems, and communications.

With increased investment in sustainable infrastructure, cities will be able to accrue significant economic, social, and environmental benefits and improve their competitiveness. Without them, they will continue to struggle with a myriad of challenges, including uncontrolled urban sprawl and congestion, increasing slum populations, and high levels of air and water pollution that reduce efficiencies and impact the quality of life of residents.

Unfortunately, local governments often face inefficiencies in providing adequate urban services. These are frequently attributed to inadequate manpower, insufficient financial allocations, cost overruns, huge infrastructure costs, and the absence of accountability in revenue collections.

Shifting some services and responsibilities to the private sector may help to improve delivery systems, increase efficiency, and potentially free up resources for other purposes. As a sustainable model for the delivery of public services, public-private partnership (PPP) can help increase infrastructure investments, expand access to urban services, and achieve more efficient and effective service delivery.

## PURPOSE, TARGET AUDIENCE, AND KEY MESSAGES

The Cities Development Initiative for Asia (CDIA) has prepared this guidebook offering an innovative view to help local governments understand how to approach a potential PPP project and to review some issues that may come up in the process.

It is one of the few guides that are specifically targeted at city officials, such as mayors and council members, as well as senior technical staff in different sectors (e.g. water, energy, roads, ports) that are just beginning to look at PPP options. It is not a book of comprehensive answers but a basic guide about how to view PPPs and where to find more information so that local authorities can come to find their own answers.

Some readers might view PPPs as an entirely new concept. For this group, we hope the guide can help you understand the many potential advantages of PPPs, along with some potential pitfalls. For other readers who might be more familiar with PPPs, we hope the guide will shed new light on certain aspects of PPPs or give you a new perspective about them.

In the guidebook, we highlight some key points as follows:

- PPP is far from a new concept, as private sector involvement in infrastructure goes back to the Middle Ages. However, while PPP has existed for centuries, many Asian cities are just now discovering their potential benefits.
- While engaging with the private sector in infrastructure provision might seem daunting and complex at first glance, and might also be perceived by the public to have undertones of political involvement and questionable motives, the overall concept of PPP is not a difficult one and can offer many public benefits.
- For local governments, a well structured partnership with a qualified private sector partner can provide much-needed finance, limit public risks, and provide cities with far more certainty, while helping to ensure that quality urban services can be provided quickly and efficiently.
- PPP can work if certain pre-conditions are met, including clear commitment and vision. The proof is in the implementation. Many past problems with PPPs have been due to faulty design and implementation, not necessarily with the concession model and conceptual framework.
- In pursuing a PPP, local authorities must often adapt to a different mindset and role compared to what they assume under a traditional publicly-financed project. Perhaps most importantly, projects
must be structured in a way that makes them attractive in a free and competitive market. They must be "bankable," meaning that they must look attractive to bankers and other providers of financing.
- There is more than one way to develop and implement a PPP. Each project is unique and there are endless possibilities. There is a lot of room for creativity, so public authorities should not feel boxed-in by narrowly-defined contract types.
- One of the most important considerations for local authorities is drafting a good contract with fair provisions for risk sharing and risk mitigation. Understanding the risks will protect both private and public parties to the agreements.


## ORGANIZATION OF GUIDEBOOK

The guide is divided in three parts:

- In "Basis", we will describe the fundamentals of the PPP model, including definitions, key principles, stakeholders, advantages and limitations from the perspective of local governments.
- In "Approach", we will provide insight about how local governments can go about deciding whether or not to pursue a PPP approach and review how this is different than a traditional publicly-financed project.
- In "Process", we offer users of this guide a basic 'walk in' of action for developing and implementing a PPP.


## PART 1

BASIS

## PART 1 - BASIS

Public private partnership is not a new concept. As far back as the Middle Ages in Europe, bridges and roads were often built by private investors and paid for by users through tolls charged under concessions granted by the feudal authorities. In their early days, most railways were financed with the proceeds of private equity and bond sales, as were the networks for the telegraph, electricity, and gas. During the first half of the 20th century, the pendulum of nationalization swung towards greater government control over infrastructure, and many of those facilities became state-owned. Today, the advantages of private investment in infrastructure are once again becoming apparent to city managers.

## 1 INTRODUCTION TO PUBLIC PRIVATE PARTNERSHIPS (PPP)

### 1.1 What is a PPP?

Broadly speaking, public private partnership, or PPP, is a means through which a local authority can engage private partners to develop urban infrastructure (assets) and related services. Although PPPs come in many forms depending on the level of private sector involvement, they generally share some common features. In a PPP:

- Various risks are shared between the public and private partners, with each type of risk allocated to the partner best able to manage it;
- These risks are allocated through enforceable contracts between the partners, whereby the private partner is bound to add value over a period of time through new investment, provision of services and management, or a combination of both;
- The private partner is paid for the original construction costs and returns on investment, often through the project's own revenues; and
- The public partner retains final responsibility to its citizens, and therefore retains the right to take back the facility if the contract is not being honored.

Overall, the basic principle is that successful PPPs balance the private partners' need to make reasonable returns with the public's need to secure access to facilities and services at a reasonable price. ${ }^{1}$

### 1.2 What is not a PPP?

Not all contractual relationships between the public and private sectors, even those involving infrastructure and provision of services, are "true PPPs." For instance:

- PPP is not a simple outsourcing of functions or services. To the contrary, in a PPP, significant, if not full, responsibility is transferred to the private partner(s) for financing, designing, constructing, and operating infrastructure projects.
- PPP is not a donation by a private party for public good. In a PPP, the private partner(s) participate with a focus on making business and profit.
- PPP is not primarily a privatization or the divesture of state assets and/or liabilities. A PPP agreement, although often renewable, has a finite life, during which the assets remain public and after which the assets normally return to public ownership.
- PPP is not the "commercialization" of a public function through the creation of a state-owned enterprise. PPP projects transfer certain operational and financial risks to the private partner(s), whereas a state-owned enterprise performing the same function keeps those risks in the public sector.
- PPP is not more borrowing by the local authorities. A principal aim of PPP is to augment public investment capacity by attracting private capital for financially self-sustaining projects, or components of projects, with borrowings secured as much as possible by the project's own assets and revenues, not by general public revenues.

[^0]
## 2 WHAT ARE THE MAIN PRINCIPLES OF PPPs?

### 2.1 The importance of the third "P" - Partnership

There are two main actors in a PPP Project. The first is the local authority in charge or in possession of the facility or infrastructure. They are the ones that contract for the facility and are responsible for the public during the course of the PPP. The second actor is the investor, which is the corporation or private entity willing to participate in the development of the business. In a PPP, there may be several different types of investor partners that contribute debt or equity investments.

The premise of a PPP project is to share responsibilities that traditionally have rested with the local authority. Through a partnership approach, both the public and private partners can meet their objectives in a project by balancing their respective strengths and abilities. This means that local governments cannot expect to turn over all the responsibility for infrastructure provision to private partners. The private partner will not be there to cover all costs and accept all the risks.


Figure 1 Partnership and cooperation must be principles of any PPP
Rather, both sides must bring something to the table. The public authority must play an active role throughout the entire process, from the initial project assessment all the way to day-to-day operations once the infrastructure is built. They must also share some of the risk. As shown in Figure 1, while each party looks at a project from a different perspective, their points of view must be complementary rather than contrary.

### 2.2 PPP is about sharing (and mitigating) risks

A key to the success of implementing PPPs is the appropriate identification and allocation of projects risks and the use of contractual arrangements to mitigate them. Among other risks, projects are subject to changes in legislation and tax codes (political risks), delays and cost overruns (constructions risks), acts of God (force majeure risks), revenue collection shortfalls (demand risks), and fluctuations in exchange rates and/or interest rates (financial risks).

In the case of a fully publicly project, the local government assumes all the risk, which leaves them open to unexpected risk events. Such events are common, especially if the project was not planned carefully. As shown in Figure 2, risk events can add significantly to the cost of a project, severely straining city budgets in the process. In turn, citizens must put up with delayed, inaccessible, or unreliable services.


Figure $\mathbf{2}$ Taking on all the risks can be costly for local governments
In a PPP project, the private sector shoulders some of the risks (Figure 3). From the standpoint of both partners - the local authority and private investor - the feasibility of the partnership will depend on which risks they assume and the extent of each of those risks. The private partner will set a price in exchange for taking on certain risks and will add on a reasonable profit.

## Publicly-financed Project



Figure 3 Example of the distribution of risks in a publicly-financed project versus a PPP project
Ideally, risks should be assumed by those who can handle them best. Generally, private partners are better equipped to manage demand and financial risks and should therefore be expected to take on these risks on a competitive basis. These risks are the essence of their business, and shifting them back to the local government forces the authority to incur liabilities it may not be prepared to handle.

The private partner will distribute the risks economically among other project participants, such as banks, engineering firms, construction firms, operators and others, such as a rolling stock provider in a mass transit project. Each of these participants will then accurately price the risks they each assume (Figure 4).

The local authority retains the risks that the private sector cannot absorb, thus enabling the private partners to undertake this 'consortium building' as efficiently as possible.

However, there are cases where the local authority might have to assume more of the responsibility or risks to develop a project than they might prefer. This is especially true in countries or places where PPPs have not been sufficiently proven. In these cases, the private sector will commonly seek to mitigate its risk, perhaps by asking the local authority to provide a project guarantee or by getting them to agree to buy part of the total output at a pre-determined price (so-called "off-take agreements).

As discussed later in this paper, risk sharing in a PPP should be determined through a negotiation between both sides to find a "win-win" scenario. Thus, city governments should not be compelled to accept such risk mitigation provisions without exploring how these might affect their own "contingent liabilities."


Figure 4 Disbursing risk among Project participants in a PPP

The most common mistake that local authorities make in a PPP is failing to structure the project in a way that balances the overall project cost with the potential benefits of transferring risks to the private sector.

Finally, it should be mentioned that multilateral development banks and insurance agencies are increasingly stepping in as third parties to assume some of the risks that private lenders or investors are unable to unwilling to take. For instance, by providing a partial risk guarantee or a partial credit guarantee, a multilateral development bank can help close a deal when a local government lacks the creditworthiness or track record to attract finance on their own.

## 2.3 "Value for money" - the many advantages of PPPs

The involvement of the private sector can often make a project more "expensive" in terms of repayment. As explained above, project risks in a PPP scheme are more clearly identified, measured, and priced when investors seek to profit from their investments. In addition financing for a PPP is typically provided at a higher rate than financing for a publicly-financed project (although in developing countries this is not always so immediate and often less obvious at the municipal level).

However, while projected costs may initially be higher for a PPP, this may be balanced out by a number of significant advantages in going the PPP route. These include the following.

- Public funds are stretched further. Involving the private sector to finance infrastructure projects allows local governments to redirect their limited funds to priority social services or policies, such as subsidies to make services affordable to those who cannot pay economic user fees or cost recovery tariffs.
- Projects are implemented faster. Public sector processes for designing, constructing and financing projects generally take longer than those handled by the private sector, where "time is money". Thus, PPPs can accelerate project completion and service delivery.
- Risks and liabilities are reduced for local governments. This advantage cannot be stressed enough. Public infrastructure investments often do not live up to expectations because too much risk is placed upon local governments, which often leads to costly and inefficient projects. PPPs can transfer much of this risk to the private sector, thereby easing the burden on cities.
- More services can be provided (doing more with limited funds). Most cities lack services and need additional infrastructure. As private investors generally finance the initial construction and operation of PPP infrastructure, city governments can develop more projects with the same budget and
borrowings, focusing their resources on those projects that are not appropriate for PPP treatment. As shown in Figure 5, for the same amount of money and effort for a single infrastructure project done entirely on the public budget, a local authority could potentially accomplish several PPP projects and/or generate resources for social projects. Savings in terms of public resources and management time are especially evident during project implementation.


Figure 5 PPPs allow more projects to be implemented with the same public resources

- Better services can be provided. The quality of public services can deteriorate after construction due to lack of maintenance, expertise, and diligence on the part of non-accountable public operators. In contrast, private operators often have more of a customer-service orientation, which can lead to higher-quality services for city residents.
- Accountability is enhanced. PPP services are provided under strict contracts between local authorities and private partners. The local authority sets service levels and then verifies and regulates the quality of the service, with financial incentives for exceeding targets or punishment for underperformance.

With all of these potential advantages, PPPs often represent good "value for money" (Figure 6). For city governments, a well structured contract with a private partner can limit their risks and provide them with far more certainty, while helping to ensure that quality infrastructure services will be provided quickly and efficiently. In the long term, the local authority could actually end up paying less over the life of a PPP project compared with taking the potentially riskier route of public finance. In some cases, they may determine that muchneeded infrastructure could not be built at all without the participation of the private sector.


Figure 6 Value for money, the benefits of bringing the private sector over the traditional approach

## 3 DO PPPs SUPPORT BROADER GOVERNMENT GOALS?

Given the advantages described above, PPP projects can also support broader government goals for reducing poverty and increasing living conditions for their citizens. For example, PPPs can:

- Increase capital expenditure for infrastructure, thereby promoting trade and commerce and generating wealth;
- Enable wider public access to services;
- Reduce transportation costs and increase transportation efficiency, thereby lowering costs to consumers;
- Provide clean water or access to sanitation to more people at a lower cost;
- Provide additional revenue to cities, thereby allowing them to subsidize services for poorer citizens; and
- In general, allow more people to access more services at lower prices.

The increased efficiency and modernization that the private sector brings to infrastructure management can also result in environmental improvements. This is particularly true for infrastructure that directly improves the environment, such as solid waste treatment facilities or wastewater treatment systems.

For example, in water supply, private operators will often work hard to reduce water leakages to improve system efficiencies and boost revenues. At the same time, this helps conserve water resources and lessens environmental impacts.

For instance, prior to pursuing PPPs in the mid 1990s, Metro Manila's water system suffered from aged water networks and inefficient services, leading to a significant percentage of water being wasted. After a concessionaire - Manila Water - took over the responsibility of supplying water to Metro Manila's East zone, the rate of non-revenue water dropped by almost $50 \%$ over the first five years.
The many actions taken by the concessionaire to improve the capacity and efficiency of the water system had a positive environmental impact (Figure 7).


Figure 7 PPP projects can contribute to positive environmental impacts
Environmental improvements can also accrue in other less obvious areas, such as transportation systems. Concessions that promote public transport also improve the environment. A bus with as few as seven passengers is more fuel efficient than an average commuter's automobile, while a fully-occupied bus and a fully-occupied rail car are respectively six times and fifteen times more fuel efficient.

## 4 ARE THERE DOWNSIDES TO PPPs?

Despite all the potential advantages and broader benefits of PPPs, there have been many well-publicized and unnecessary failures in planning, structuring, and implementing PPPs. For instance, many water concession contracts signed by Asian cities in the 1990s have been plagued by legal disputes and re-negotiations. Problems have centered on poorly defined responsibilities in the contracts, lack of sharing of efficiency gains, and weak regulatory effectiveness.

In some cases, governments have not fully understood their contractual responsibilities, especially their "contingent liabilities." For instance, when the Asian financial crisis hit and PPPs started experiencing cash flow and profitability problems, some governments balked when risk mitigation mechanisms were triggered. Some of them repudiated their obligations, forcing projects into renegotiation or collapse.

It is important to put such experiences into proper perspective. Unsuccessful PPPs do not point to a failure in the overall concept of PPPs. Instead, they should serve as reminders that PPP projects have to be adequately structured and implemented, factoring in a range of technical, financial, socio-economic, and political issues. If done right, PPPs will very likely increase the quality and value of services to consumers.

In the face of changing market realities, local authorities in developing countries should consider innovative approaches to structuring projects. At the same time, they must take a pragmatic approach, being careful not to get trapped in unsuccessful and costly projects that have not been vetted carefully enough.

Some of the lessons reviewed in Part 2 - conducting proper due diligence, determining an optimal mix of public and private money, and avoiding too much risk - are essential. Perhaps most importantly, local governments should stay committed to providing much-needed infrastructure in their cities. The alternative old and poorly maintained infrastructure - will only lead to lost capacity, lower employment, and economic hardship.

# PART 2 <br> A P P R O A C H 

## PART 2 - APPROACH

As discussed in Part 1, PPP can be a great tool to leverage local financial and human resources and also to gain skills and efficiency in managing services. However, public authorities should also be aware that it cannot be a solution to implement all their projects.
Part 2 of this guidebook presents some suggestions for how local governments might consider whether or not to pursue a PPP. The following sections also review some changes city governments may need to make once they decide to go the PPP route. The main message is that, behind every successful PPP, there is a committed local administration that understands the benefits and potential risks of the partnership.

## 5 IN WHAT SECTORS CAN PPPs BE APPLIED?

The PPP approach is being applied creatively at the city level to an ever-widening range of sectors and project types. Because they are designed to draw on the strengths of both the public and private sectors, PPPs are commonly applied to sectors where there are overriding social, political, or economic goals.

For all the project types presented in the table to the right, there is at least the potential for pursuing a PPP approach. However, PPPs may be more feasible in some sectors than in others, depending in large part on specific local and national circumstances beyond the financial parameters of the project itself. Such circumstances may include citizen attitudes toward the sector or the number of affected stakeholders - anything that can add more complexity to the process.

Implementing a PPP can be particularly challenging in a sector in which services and facilities are provided for free or for a fraction of the real cost. In such cases, a proposed PPP project can meet stiff opposition, since it may require asking users to pay for a service they may view as a human right rather than as a commodity. Such opposition can sometimes be extremely difficult to overcome.

A good example is sewerage and wastewater treatment. Since users cannot see or easily conceptualize the value of improved sewerage and wastewater treatment, they often resist paying direct fees for it, making PPPs in this sector a difficult proposition.

Nevertheless, wastewater and sanitation projects are very good candidates for PPP projects and are among the most common forms of infrastructure that are build and operated under PPP schemes at the city level. This shows that, through commitment, innovation, and patience, even the most difficult PPP projects can eventually succeed.

| TRANSPORTATION |
| :--- |
| Roads \& bridges |
| Passenger \& freight railways, <br> light rails systems |
| Metros \& subways |
| Ferries |
| Bus lines including BRT |
| Transport hubs \& terminals |
| Airports \& ports |
| UTILITIES |
| Water treatment \& distribution |
| Sewage systems \& wastewater treatment |
| Solid waste treatment |
| Power generation \& distribution |
| Central heating \& cooling systems |
| SERVICES |
| Hospitals \& jails |
| City government offices |
| Sports facilities \& auditoriums |
| Police \& fire stations |
| Libraries |
| School \& University dormitories |

## 6 HOW CAN POTENTIAL PPP PROJECTS BE IDENTIFIED?

Serious consideration should be given to using a PPP approach in cases where the expertise, resources and dynamism of private partners can significantly improve a project, and where the responsibility for service delivery, along with the operational and financial risks, can be allocated across a range of public and private participants. A simple decision process to identify potential PPP projects is shown in Figure 8 and explained in the subsections below.


Figure 8 Simple decision process to identify PPP potential projects

### 6.1 Is the project a good candidate for a PPP?

If a local authority decides to pursue a PPP, they must remember that they are bringing a project to the market requesting for money and skills. To gain access to both, the project must be attractive to potential private partners.

Doing so will require the local government to think like a potential investor. For starters, the borrower for a PPP project will be a private company that typically has limited resources and will be capable of collateralizing ${ }^{2}$ only a finite amount of financing with their own assets. Instead, they must largely turn to project finance, meaning that they must rely on the project's own revenues to repay most of the financing for the investment, as well as to earn a profit.

In this way, investors in private entities are able to loan large amounts of money for infrastructure projects, while putting up only a small amount of their own resources and providing no other collateral but the projected income from the project. This is much different than the loans for publicly-financed projects, which typically require government warranties.
In principle, any infrastructure that can generate revenue can potentially be a good candidate for a PPP. In most cases, a good test is whether the projected revenue will balance the cost of the project within a reasonable timeframe. To accomplish this, users must be willing to pay for the new or improved services. If

[^1]not, it does not necessarily mean that a PPP is not feasible, but some other arrangement must be found to compensate the investor.

The entire project as a whole need not generate revenue provided the local authority can "unbundle" the revenue-generating components and package them on their own. This is a very common practice in many sectors. Examples include parking garages in municipal buildings, tenant businesses at railroad stations, methane outputs from landfills, recyclable scraps in solid waste streams, rolling stock in public transport projects, and treatment plants in water systems (see Annex 1).

To successfully unbundle project components, the local authority must be able to "ring-fence" them, meaning that they must keep revenues from the unbundled component(s) separate from the larger system. This provides more certainty to investors, thereby reducing their risks and increasing the chances that a PPP arrangement can succeed.

Provided a project can be ring-fenced and the use of the services can be properly measured, a PPP scheme may still be possible even if project costs are not covered directly by user fees. For example, "shadow tolls" are sometimes used in road projects, whereby a local government pays for the service according to the use of the road in lieu of regular tolls paid by individual drivers. Similar arrangements can also be applied to social infrastructure, such as public schools, hospitals, and jails.

### 6.2 How would potential investors view the project?

Before approaching potential investors, local authorities must understand how their project might be perceived on the market and realize that their project must be more "marketable" than other projects that may be competing for investors' time and money.

Potential financiers and sponsors look at projects as businesses. They are careful to analyze all potential risks before they commit to a project and also to structure project contracts to address all of the risks they have identified. In the process, they help ensure that the project will operate as planned and recover all of its costs, despite any risk events that might occur along the way.

Figure 9 presents a basic mapping of perceived risks from the viewpoint of investors based on two criteria - the certainty of a project's financial viability and the level of control that the investor will retain over the project. ${ }^{3}$ The less control and less certainty about the source of incomes, the more risky a project is perceived by investors.

Only in the case of full privatization, where an asset is sold or transferred to a private investor, does a public authority give up permanent ownership of a facility. ${ }^{4}$ However, even in these cases, the public authority may still play a significant role. For instance, for a power generation facility or a communication network, a local authority will retain some responsibility, such as setting tariffs and/or ensuring the quality of the service. Another example at the local level is municipal land transferred to private hands that will serve a public purpose, such as building a hospital. As long as the project is a public service, the local authority retains some level of responsibility.

In this map, we can place Joint Ventures (JV), where public and private partners join in ownership, somewhere in the middle, as the perceptions of risks are very different depending on the specific JV arrangement and the type of project.

[^2]

BT - Build and Transfer; BOT - Build, Operate and Transfer; BTO - Build, Transfer and Operate; BLT - Build, lease and transfer;DOT - Develop, Operate and Transfer; ROT - Rehabilitate, Operate and Transfer; CAO - Contract, Add and Operate; BOO - Build, Own and Operate; ROO - Rehabilitate, Own and Operate

Figure 9 Perception of project risks from the standpoint of potential PPP investors
One of the first criteria that an investor will consider is whether the project is a "Greenfield" or a "Brownfield" or a combination of both (Box 1). A potential investor will also be looking for a certain amount of flexibility (e.g. regular tariff reviews) to ensure that a project remains profitable. Without such level of control, they may choose not to participate in the project.

## Box 1: Risk perceptions of "greenfield" and "brownfield" projects

For a "Greenfield" project, the infrastructure in question has not yet been built or placed in service, and therefore the financial fundamentals of the project are only suppositions and projections. Risks often come from unknowns or assumptions in the engineering or financial calculations. Sometimes these risks are so high that the project is not commercially viable as a PPP.
For a "Brownfield" project, the basic infrastructure is already built and in service. Data on income and operational costs are not projections, but are far more tangible. Thus, these projects are often easier to market to potential investors since there is more certainty about revenue streams and how the project might evolve.
However, it is important to realize the projects fall along a spectrum of perceived risks. For instance, some Brownfield projects might be perceived as riskier than others based on the quality of the assets and the reliability of existing data. If investors determine that such projects will require a significant amount of rehabilitation before they can start generating sufficient revenue, they will proceed accordingly.

Determining where a project falls in the spectrum above can help a local authority identify and prepare for potential tradeoffs. For instance, passing full responsibility to the private sector for operation, maintenance, rehabilitation, renewal, systems expansion, and long-term financing creates an incentive for the private partner to be efficient in all of its activities. However, the private partner may then view the project as risky and will price the contract accordingly and/or may seek to transfer some risks back to the local government by means of guarantees or direct payments.

As an illustration of this point, consider a new road project that is close to the breakeven point (i.e. projected profits roughly equal projected costs) and there are external factors that can make this forecast very sensitive. Private partners may be interested in the project but will likely be concerned about insufficient traffic. In response, they may request a minimum demand guarantee to ensure stable long-term revenue.

If possible and reasonable, the local authority could consider granting such requests. However, they should not do so without limiting their liability and/or requesting compensation from the private investor. For example, this could take the form of sharing profits with the private sector in the later parts of the contract or extending the period of the concession.

All of these details will be worked out in the final negotiations (see section 14), but it pays to think them through from the very beginning. That way, the public authority can be clear about what it will, and will not, provide in a PPP arrangement.

In the end, there are many approaches to structuring PPP projects and many options should be considered to find the most appropriate structure that balances the needs and interests of local authorities, investors, lenders and consumers. There is a lot of room for creativity, so local decision makers should not feel boxed-in by narrowly-defined contract types. This lesson is demonstrated in the Banda Aceh case study provided in Annex 1.

### 6.3 Does the PPP represent good "value for money"?

As described in Section 3.3, a PPP should offer better 'value for money' over public-financing; otherwise, a local authority should not pursue it. This lesson bears repeating here. Local decision makers sometimes proceed with a PPP after determining a project is marketable, but without asking the important questions of why they want to pursue a PPP in the first place and whether the potential benefits outweigh the potential downsides.

Value for money analysis is commonly used to guide procurement decisions. However, its principles can also be used in making judgments about the worth or significance of any project. Typically expressed as statements rather than ratios or other mathematical figures, this analysis compares total costs (direct, indirect, and lifecycle) compared to total contributions.

There are a number of possible contributions that can be evaluated, including tangible contributions (e.g. better quality, citizen satisfaction) and intangible contributions (e.g. increased stakeholder participation, enhanced organizational capacity, and broader development goals). Selected contributions can be weighted to reflect organizational emphasis or priorities and scored to provide an overall score to summarize the 'contributive value' of the project.

## 7 WHAT CHANGES ARE NEEDED TO UNDERTAKE A PPP?

Once a local authority has decided to pursue a PPP for one or more infrastructure projects, it is advisable for them to assess whether they have the necessary foundation to push forward. Such a decision must be based on realistic assessments of all current and projected constraints and with the full knowledge of what a PPP process entails and how this differs from standard on-budget project implementation.

### 7.1 What are the key elements of success?

While not the only requirement for success, unwavering commitment is arguably the most important element that a local government can bring to a PPP. With commitment and vision, viable solutions can almost always be found and challenges overcome.

In comparison, ignoring or backsliding on commitments (for instance, to deal with seemingly more immediate priorities), will likely doom the partnership to failure. This could come at a heavy cost, as much-needed public services might be sacrificed in the process. Since infrastructure projects have long preparation periods, turning away from infrastructure commitments can have long-term effects.


Figure 10 Successful PPP projects are wrapped by few key elements from a local government standpoint

As shown in Figure 10, other key elements that local governments must bring to a PPP process include the following:

- Commitment to, and capacity to handle the procurement process. This starts with a pre-feasibility study and initial programming of the PPP component(s) of the project, through contract negotiation and award, and all the way to monitoring of day-to-day operations;
- Commercial, financial, and economic issues. For instance, traffic and demand forecast must be reliable, and all parties must be able to abide by the PPP contract, etc.
- Technical issues. This includes reliable engineering and other technical assessments.
- Legal, regulatory, and policy framework. A clear and transparent framework helps govern both the pre-transaction stage (e.g. selection, screening, structuring, tendering, and evaluation) and the posttransaction stage (e.g. regulation and monitoring). Most important is the PPP contract itself, which will govern the partners in the project.


### 7.2 How important is a sound legal, institutional and regulatory framework?

Many countries in the Asia and Pacific region have issued regulations, recommendations, guidelines, laws and other papers on how to regulate the participation of the private sector in public infrastructures/facilities. These frameworks are not homogeneous, and many continue to evolve. Without them, however, PPPs run into multiple problems, such as high-priced bids due to lack of competition, long transaction and negotiation phases, and sometimes disputes and litigation.
Countries that are known to have at least some regulations in place include China (People's Republic of), India Indonesia, Pakistan, Philippines, Sri Lanka, and Thailand. In addition, in many countries, enabling legislation is supported by PPP units or centers, which help facilitate the process and procedures for PPP project development (Table 1 below).

While PPP projects are more likely to be affordable, "bankable" ${ }^{5}$, and effective in countries with clear and transparent national frameworks, successful PPP projects can still emerge on the local level in countries with immature or incomplete legal, institutional, and regulatory setups. Indeed, many successful PPPs have been established in countries with unspecific regulatory systems. In fact, specific regulatory frameworks for PPP are very recent even in developed countries.

[^3]For a local authority, what is most important is to establish a suitable regulatory regime within the body of the contract, including arrangements for increasing tariffs and dealing with unexpected changes. The key is to provide all parties with legal clarity over the long-term (to match the investment horizon).

Table 1 Centers in Asia and the Pacific

| Country | Facility |
| :--- | :--- |
| Bangladesh | http://www.iifc.net/ |
| China, Peoples Republic of | http://www.ccppp.org/ |
| Fiji Island | http://www.fiji.gov.fj/publish/page_10482.shtml |
| India | http://www.pppinindia.com/contact-cells.asp |
| Indonesia | http://pkps.bappenas.go.id/index.php/English/Home.html |
| Kazakhstan | http://www.ppp-center.kz/eng/ |
| Korea, Republic of | http://www.pimac.org/ |
| Pakistan | http://www.ipdf.gov.pk/ |
| Philippines | http://www.botcenter.gov.ph/ |
| Malaysia | http://www.ppp-advisory.com/overview.htm |
| Singapore | http://www.mof.gov.sg/policies/ppp.html |
| Sri Lanka | http://www.boi.lk/ppp/ppp.html |

## PART 3

## PROCESSES

## PART 3 - PROCESSES

The process of putting together a successful PPP project requires an approach that might be quite different from what most public authorities have previously practiced in developing standard publicly-financed projects.

Thus, authorities often have to adapt to a completely new mindset and role when they undertake PPP arrangements, requiring them to learn new ways to structure and measure projects and to grasp new concepts, such as viability and bankability. Some of the important differences, explored in greater detail in the following sections, include the following:

- Focus on partnership: As stressed in Part 1, the public authority is now looking for a partner, and the relationship is much different than that with a contractor. Under a PPP, contractual relationships among public and private partners prevail over hierarchical control.
- Market rules: For a PPP, the public sector must make their projects attractive in a free and competitive market, where investors and participants must be enticed to participate, not compelled, persuaded or commanded.
- Unfamiliar bidding processes: Unlike sole sourcing or direct negotiations, a well-structured competitive process provides bidders with an incentive to submit quality offers (e.g. investment levels, efficiency, technology) at a reasonable price. Local governments may find it difficult to find a reliable company with the necessary experience and skill to develop and finance a PPP project. They will likely look beyond the companies they usually work with and perhaps even open up the search to international bidders.
- More extensive selection standards. For a traditional publicly-financed project, the technical configuration is defined by the public authority, and the evaluation of bids is usually limited to the background and soundness of the company, the price, and the schedule. In a PPP, the evaluation process is much different. It involves selecting the candidate that offers the best overall package (e.g. quality of technical solution, value-for-money, price, etc.).


## Who are the stakeholders in a PPP?

As shown in Figure 11, for all of these different aspects, stakeholder involvement is an integral and important element. From the very beginning and in all stages, efforts should be made to include the visions of all the parties that will be involved in and affected by the project.


Figure 11 Stakeholders are an integral and important part of a PPP

In addition to local authorities and investors, other stakeholders can include:

- Users: Those that will be using the facility or services. They have to perceive an improvement in the facility to understand the involvement of the private sector, especially if they are told to pay for (or more) for something they were getting it "free". ${ }^{6}$
- Financers: Banks or other institutions providing the capital needed to build the facility. Particularly commercial banks are adverse to risks.
- National or Regional Government: Any local authority depends on a higher authority to accomplish PPPs, either directly or indirectly under its regulations or laws.
- Affected Population: Those directly or indirectly ${ }^{7}$ affected by the new or improved infrastructure.

The following sections will describe some important considerations for each stage of developing and implementing a PPP (Figure 12). We did not delve into the specifics of the process (e.g. whether to conduct bidding at the national or international level, prequalification of bidders, single stage versus double stage bidding), but we instead provided some useful links where local authorities can go to find this guidance.


Figure 12 Basic steps in PPP project

It is important to note that there are endless possibilities for engaging the private sector. Since each project is unique, local decision makers will not likely be successful if they follow the exact step-by-step procedures of other PPP projects.

[^4]The success of a PPP project is determined in large part by the design of a contract between public and private partners. A balanced contract, where both parties feel comfortable providing what they think they can do best, is fundamental in ensuring a smooth relationship and a successful PPP. In turn, this is a function of a comprehensive and detailed assessment at the beginning of the PPP process. In the assessment phase, PPP approaches are turned into practical PPP projects and transactions.

### 8.1 Should public authorities be involved in the project assessment phase?

A local authority should conduct its own assessment to make sure that a potential PPP project is affordable and offers value for money. This assessment should involve conducting their own pre-feasibility and feasibility (PFS/FS) studies, examining the true cost of the services, and assessing contracting options, among others.

Initially, project assessment should focus on determining whether a project is a good candidate for private financing and/or management. As reviewed in the sections above, this is generally based on a number of criteria, such as the commercial, investment and efficiency potential of the project, as well as its ability to meet the requirements of the private sector.

Such due diligence on the part of the local government will help them avoid wasting money on developing projects that are not appropriate for PPP treatment. For those projects that are deemed appropriate, prudent project assessment will help them evaluate bids on the basis of consistent operating and investment projections. Some authorities make the mistake of leaving all this work to bidders, which tend to put different amounts of time and resources into feasibility studies and asset reviews. As a result, bids can sometimes be based on incomplete or inaccurate views of investment needs and can be difficult to compare.

### 8.2 How many stages are there in project assessment?

After an initial assessment by the local authority, project assessment usually proceeds in two stages - a prefeasibility stage that happens before the bidding process and a more detailed feasibility stage that generally occur before projects reach financial closure. ${ }^{8}$

At the pre-feasibility stage, projects are formulated and structured in terms of their technical design and financing. This stage is critical, as it will serve as the stepping stone that will guide the entire PPP process, including:

- visualizing the project within the PPP framework;
- selecting technical alternatives;
- establishing the risks of the project;
- presenting the project to the private sector to generate interest;
- structuring the public procurement, or bidding, process within applicable regulations or laws; and
- guiding the bidders' own pre-bidding due diligence and feasibility studies.

In the feasibility stage, the final design and project financing are determined. This stage includes many of the same elements of the pre-feasibility stage, but the analysis is typically more detailed. It will include a comprehensive study of the technical, economic, financial, and legal feasibility of the project and also a "demand analysis" to determine the current and future demand for the services. The latter helps determine if the investment is justified and is often where projects succeed or fail. Finally, the feasibility phase will help determine the appropriate PPP structure.

There are many ways to structure the assessment process. The pre-feasibility and feasibility stages can be combined into one exercise, but the iterative nature of preparing PPP projects usually requires that they be kept separate. Assistance from a wide variety of institutions is available to undertake such assessments. Annex 2 presents the typical elements of a feasibility study in more detail. ${ }^{9}$

[^5]
## Box 2: Feasibility analysis for a sanitary landfill

Increasingly, Asian cities are looking to the private sector for capital investment in the solid waste sector. In the assessment phase, a number of different types of analysis and data would be needed for a potential PPP project in this sector.

- Since there are significant economies of scale for sanitary landfills (costs per ton decrease as the size of the facility increases), the private sector will be looking to ensure a certain flow of waste into the facility to guarantee revenues for recycling and disposal operations. Thus, part of the feasibility stage will entail collecting data on existing and projected waste quantities and waste densities from different sources.
- To determine which service options could be viable, cost analyses would be performed on different disposal options. This would include a review of capital requirements and projections of the O\&M costs and full amortization of each. The land to be allocated to new facilities would also need to be appraised and valued.
- The demand analysis would likely require a study of the willingness and capacity of residents to pay for improved services. To assess willingness to pay and demand, the potential recipients of services would need to be asked about their opinions on service options, costs, and methods of payment.
- The feasibility of undertaking waste recycling as a source of revenue generation should also be explored, together with on-site recycling and composting activities which minimize waste generation as a voluntary alternative to payment of the full service charge.


## 9 MARKETING

The second broad phase in a PPP process is marketing the project. Often overlapping with the project assessment phase, this phase involves "selling" the project to potential private sector investors. Like in an auction, the success of a PPP tender will depend on the ability of the public authority to attract numerous bidders through a competitive and transparent bidding process. For large projects, it is important to achieve regional or even global visibility.

In this stage, it is important for local authorities to remember that they are seeking scarce resources - money and expertise. Increasing numbers of project are seeking these resources, and only the best prepared projects will secure them.

### 9.1 What type of investment partners should local authorities look for?

Based on the feasibility assessment and financial structuring, there may be several different types of investor partners needed. Local authorities should seek investors who are operating at the same scale financially as the targeted project(s) and who are competent in the relevant sector. For instance, they should not bother marketing a wastewater project to a company that invests only in hydroelectric projects. Likewise, a city should not waste its resources in marketing a $\$ 5 \mathrm{~m}$ project to a bank that lends a minimum of $\$ 50 \mathrm{~m}$. However, investors and developers come in all sizes, and even a small- to medium-sized project can be attractive to international investors or developers if the project is well structured and the local government is welcoming, responsive, and committed to being a good PPP partner.

### 9.2 Should local governments seek outside expertise to help with marketing?

If the project is large enough ( $\$ 25$ million and over), local governments should consider retaining top firms or investment banks to prepare and disseminate marketing documents for maximum visibility to the widest possible audience of bidders. If a potential investor does not know about a project, obviously they will not be bidding. ${ }^{10}$ For smaller projects, a reputable and experienced consultant team, local or international, may have the technical capacity to assist the local authority to prepare and market this information.

[^6]
## 10 BIDDING

Once the assessment has found that the project is viable, the project will be prepared for bidding. As described above, a well-structured and competitive bidding process will help potential investors justify providing finance and expertise for a project. For that reason, summaries of financial and demand analyses must show that the project is viable and attractive. Remember, if the investor fails to construct and operate the PPP successfully, the local authority must share in that failure.

Although it is possible to engage directly with different actors for different aspects of a project (e.g. one as contractor for the construction and another for operations and maintenance), this is not usually optimal. Normally, bidders form consortia groups that incorporate all the various skills needed to accomplish the project. For a local authority, this is a very good arrangement since they can coordinate through one lead firm that will take overall responsibility for project implementation and performance. In addition, financial investors are more confident and likely to provide funding to a consortia orchestrated by a strong lead firm

### 10.1 What information do local authorities need to provide bidders?

To ensure a successful bidding and selection, local governments must carefully design the process and provide good quality information to potential bidders. The number and types of bidding documents will vary from country to country and might vary somewhat depending on whether authorities are targeting international investors or local investors. The latter group often requires less documentation because they understand the context in which the investment will be made.

The primary document governing the process is the request for proposal (RFP), which the local government will often issue only to prequalified bidders. At a minimum, the RFP should include the following:

1. Instructions to Bidders:
a. General description and objectives of the project;
b. Contractual arrangement under which the project shall be undertaken;
c. Bid submission procedures and requirements (number of copies, venue, deadlines, transmissions, bid opening, etc);
d. Investment incentives and authorities undertakings, if any;
e. Bid security and bid validity period;
f. Milestones;
g. Method and criteria for the evaluation of the technical component of the bids;
h. Evaluation criteria and parameters for the evaluation of the financial component of bids;
i. Minimum amount of equity, if necessary;
j. Formula and indices to be used in the adjustment of the tolls/fees/charges/rentals;
k. Any requirements of any concerned regulatory body for the review or adjustment in the formula of the tolls/charges;
I. Revenue sharing arrangements, if any;
m. Expected commissioning date; and
n. Summary of financial studies and demand studies.
2. Minimum design, performance standards/specifications, and economic parameters, such as discount rate, inflation factor, or foreign exchange rate where applicable, among others.
3. Draft contract or concession agreement, reflecting the contractual arrangement under which the project shall be undertaken, and the respective undertakings of the contracting parties.
4. Amounts, structure, conditions, and forms of bid and performance bond.
5. Applicable rules and regulations and other documents as may be deemed necessary by the authority concerned.

RFPs may be accompanies by other project information, such as financial models, spreadsheets, slide presentations, and photographs.
In all cases, project documents must be well-prepared and professional, but this is especially important for 'high-profile' projects. In those cases, local authorities will be marketing to an international audience and the documents will have to speak to them, at least initially.

## Box 3: Dealing with unsolicited offers

An unsolicited offer occurs when a private proponent approaches a government with an idea for a PPP. Discovering that there is a private party interested in implementing a public service can provide a valuable impetus for a public authority to pursue a PPP, as they may not have previously identified the PPP potential of a project.
However, while entering into a direct negotiation may benefit the city and its citizens by saving time and money, such an arrangement could be seen as non-transparent or even corrupt. Indeed, such an uncompetitive situation can result in the private proponent taking advantage of the situation and 'cheating' the government of 'value for money'.
Therefore, it is important to follow clear rules for dealing with unsolicited offers. Some countries have legislation in place that lays down these rules. In Korea, for instance, authorities must, upon receipt of an unsolicited PPP project proposal, open the bidding to other proponents. If there are no such rules in your country, there are good models to follow.
Good examples of procedures to be used are documented in:
http://web.worldbank.org/external/default/main?theSitePK=4817374\&piPK=64860384\&pagePK=4710368\&menuPK=5 117613\&contentMDK=21759171\#practice

### 10.2 Why is transparency important in the bidding phase?

Whether the competitive bidding is done on the national or international level, an important element is a formal public process for presenting proposals, evaluating them, and selecting a winner. Participatory process will allow stakeholders to voice their concerns and gives public authorities the opportunity to establish transparency and accountability from the very start. Local authorities can accomplish this by informing the public about the process (Box 3) and/or making changes if there are public objections. In the end, such efforts can result in a more viable and attractive project for the private sector, with fewer objections to be dealt with throughout the life of the project. ${ }^{11}$

## Box 4: Promoting Transparency - The Case of Manila Water (Philippines)

To build support for introducing private participation in water and wastewater services in Metro Manila, the Government of the Philippines embarked on a comprehensive strategic communications program that included among its objectives the promotion of transparency in the PPP transaction. To educate the public on the measures being taken to ensure transparent procurement, the Government launched a media campaign months before the bidding process to explain the process and the precautions being taken.

Because public procurements in the Philippines are commonly subject to protests, congressional inquiries, and graft investigations, the media campaign focused strongly on the elaborate security measures that would be used to protect the integrity of the bids. In addition, it highlighted the objective nature of the evaluation process, which did not award points for the quality of the technical approach. To ensure that media was informed about the bid process, the Government also prepared a video presentation regarding the rules for bidding and the procedure for opening bids, which was open to the public.

The high-profile communications and public relations efforts of the Government resulted in strong media coverage of the bid process. It did not produce the controversy or opposition experienced during prior public procurements. The Philippine Government attributes the project's success largely to the design of a transparent procurement process and, just as importantly, to the perception among stakeholders that the process was transparent.

Source: Dumol, Mark. 2000. The Manila Water Concession: A Key Government Official's Diary of the World's Largest Water Privatization. Washington, DC: World Bank

[^7]
## 11 EVALUATING BIDS

### 11.1 How should local authorities evaluate bids for a PPP?

As described before, evaluating bids for a PPP is much different than evaluating bids for a traditional publiclyfinanced project. The process involves more elements and criteria, as described below.

Therefore, a clear structure for the assessment needs to be in place. In some countries, procedures are set by clear legislation, and these must be carefully followed. Such procedures should be augmented with additional criteria, depending on the circumstances of the project. This should include a predetermined weight to be given to the technical proposal versus the financial proposal.
The evaluation of the technical proposal should be conducted based on preliminary technical data and forecasts. Bidders will provide technical solutions to match the project requirements. Therefore, the local authority must undertake a complete evaluation of each technical proposal, including procedures for operating and maintaining the facility/infrastructure and for eventually returning assets back to the authority in good condition.

For the financial proposal, the evaluation should not just award the bidder who offers the lowest tariff or highest price, but should also assess other factors, such as duration of the contract, tariff structure, realism of projections, fair profit rate, and/or profit sharing.

These assessments must be done by people with a deep knowledge in their field. If responsible officials do not have sufficient knowledge, consultants should be engaged to assist in the evaluation process. International procedures for evaluation are relatively well established, and advice can be sought from a variety of public agencies and consultants. ${ }^{12}$


Figure 13 Basic Evaluation Process

### 11.2 What is the expected level of detail?

For the technical proposal, a comprehensive description of the system and operations is necessary. However, the final detailed design is often done after the contract is awarded. This may result in changes during PPP project implementation. Thus, procedures need to be in place to ensure that any changes are adequately justified if they are significant diversions from the original proposal.

Comprehensive detail on income sources, showing, for example, the fare/toll price calculation and proposed escalation should be provided in accordance with the parameters set out in the terms of reference. Comprehensive details on implementation and operation and maintenance costs must also be provided, as well as cash flows and profit and loss for the duration of the entire project.

Finally, a complete financial report, along with assumptions used, must be provided with details on interest rates, exchanges rates, inflation, escalation of prices, debt service and other relevant information. This report should be evaluated to determine the realism of the assumptions and the viability of the project.

[^8]
### 12.1 What are the objectives in negotiating a PPP?

Negotiating a traditional project typically involves agreeing or disagreeing to a bidder's proposal based on quality, schedule, and price. This is not the case for a PPP. Once a preferred bidder is selected, a local authority must still enter into negotiations with them, with the understanding that they will be entering into a long-term partnership. These negotiations must yield win-win solutions.
The most important objective of negotiations is to come out of the process with a contract that protects the interests of the general public and, at the same time, gives room for the private investor to make a healthy profit. Local authorities should not forget that the private investor is the source of the finance and has the necessary skills. If they are at the negotiation table, it is because they have been judged to have the best technical and financial proposal.
In pursuit of the first objective, it is important that the local authority does not agree to accept any risks that can be left with the private sector, such as construction risks and demand risks, unless absolutely required by project circumstances. Taking on risks that would normally be assumed by the private sector reduces the PPP's 'value for money' and thus greatly diminishes the justification for a PPP.
Third, local authorities should secure the availability of financial resources. Even with the best skills, a lack of financial resources will put the project in jeopardy. They must be certain that the bidder has the capacity to carry through with the project despite any adverse financial circumstances in the wider economy.
Fourth, authorities must ensure adequate operation and maintenance throughout the life of the project. Thus, in the negotiation, it is important to clarify the performance/quality indicators and the penalties for nonperformance.

Finally, local authorities must ensure the successful return of assets after the contract is finished. They should be returned in operational condition and a guarantee period should apply after handing over.
The requirements regarding these points should be well defined in the bidding documents, and bidders should specify how they will handle each of them. However, local leaders should expect some give and take, as in any negotiation. ${ }^{13}$

### 12.2 Who should be on the negotiating team?

The key decision-makers on both sides should be the main negotiators, supported by experts if needed. A negotiation without the main parties will only delay contract award and cause problems in project implementation.

As a general suggestion, the technical and financial experts from each side should meet first to identify issues that may need resolution by their principals. Following that, the key decision-makers from each side should meet, accompanied by their respective experts, and negotiate final terms. ${ }^{14}$

## 13 MONITORING AND EVALUATION

### 13.1 What should be monitored in a PPP?

There are two phases of contract monitoring. The first occurs during the implementation period and the second during the operational life of the asset or term of concession.

During implementation, we distinguish between the detailed design and the construction phases. Since the consortium is building public infrastructure that will revert to the local government at the end of the contract, the authority should supervise the quality and performance of the works, as well as ensuring the quality of the implementation.

The supervision can be assigned to the technical services of the municipality if they have the capacity. An engineering consultant acting on behalf of the municipality can also be of help.

[^9]During the operational stage, it is necessary to monitor the quality of the service provided, tariff levels, and the finances of the project. Normally, a supervisory body or agency is created at the municipal level to supervise performance and the activity of the investor.
A number of quality Indicators should be set in the contract in order to measure the quality of the service. These are different depending on the type of project. For example, in a water supply project, they will be related to the quality of water and the number of houses connected to the system, while in a road project, they will be related to access, accident rates, surface maintenance and road safety.

Indicators should be linked to a logical and transparent penalty system to guarantee the performance of the operator. Although these activities should be performed by technical personnel, the reports and the implementation of sanctions, if any, should be approved by the supervisory body in charge of the control of the contract.

Finances and tariffs require a lower level of supervision with respect to the number of controls, but require use of skilled accountants and auditors in order to certify the proper accounting and allocation of the revenues and payments. Such careful monitoring is particularly important if the contract includes revenue or profit sharing with the authority or allows for potential revisions of the tolls/tariffs according to performance. It is also useful if the authority is applying some contributions or subsidies.

### 13.2 What happens if there is a contract failure?

If project risks have been allocated properly for every party at every stage, it is unlikely that there will be a failure in the contract. Even if a parent company of the private investor goes bankrupt, a project incorporated in a joint venture or special purpose vehicle should be insulated from failure of the parent company (and viceversa).
However, local authorities should understand that PPP contracts run for long periods, and financial and economic situations may change significantly over time. Therefore, for a variety of reasons, circumstances may force a breach in the contract. Should this situation arise, the best solution is to renegotiate the conditions of the contract, if possible in a temporary manner, until the conditions that caused the breach change, if they are exogenous.
If the failure comes from underperformance of the investor, for instance through a clear and repetitive breach of the contract, the authority should "rescue" the project by means of taking back the risks and responsibilities originally transferred to the private sector, instituting appropriate penalties where possible. In this case, a detailed evaluation of the real cost and required additional investment should be done in order to pay for the parts of the project executed and not amortized, as well as to ascertain what penalties or indemnities are due to the authority for the breach of the contract. The local authority can choose between taking the full responsibility for the infrastructure and tendering again for a new investor or keeping the facility within their full responsibility. ${ }^{15}$

[^10]
## 14 CONCLUSION

Public-private partnership can be a great tool to leverage local government resources (i.e. money and personnel) and to gain much-needed expertise in managing urban services. However, it is not a magic wand that will serve as a solution to implement all infrastructure projects in a city.

There are endless possibilities for engaging the private sector, and each project will be subject to specific circumstances within a city. Each PPP project will be unique. Thus, city officials cannot simply follow the exact blueprint of successful PPPs in other cities; they must find their own solutions with private sector partners.

The most important element to make any PPP successful is the commitment of the local authority. This, together with the participation of all stakeholders, will establish a stable platform that will make a project more appealing to potential private sector partners.

If local governments do not possess the requisite knowledge and skills to pursue a PPP on their own, they should not hesitate to seek outside assistance, as long as they clearly understand the overall vision and guiding principles of the PPP arrangement. Local decision makers must also have a firm understanding of the risks they will assume under a PPP, as well as their "contingent liabilities" should things not go as anticipated.

Outside advisors, whether they are local or international, should be familiar with current market practices and standards, able to prepare project documents to those standards, and capable of exposing the project to potentially-interested private investors and developers. ${ }^{16}$ There are a number of organizations that can help in these tasks and a variety of consultants with experience in bringing deals to implementation. Each has their own particular strengths in terms of participation and involvement. ${ }^{17}$

In addition to those skills for hire, there are a number of helpful sources of information and assistance readily available. As mentioned earlier, PPP Units have been created by central governments to help catalyze PPP projects. Many of them publish materials and guides and are there to facilitate PPP arrangements.

In addition, ADB's Cities Development Initiative for Asia (CDIA) stands ready to assist cities in Asia and the Pacific. Established in 2008, CDIA encourages local governments to use PPPs and other forms of private sector involvement, where appropriate, to finance infrastructure projects and the delivery of municipal services. The initiative strengthens the links between participating cities' urban planning and investment programs and projects, thus contributing to the promotion of sustainable and equitable urban development.

For further information about how to implement a PPP in your city, you can contact CDIA at pppinfo@cdia.asia.

[^11]
## ANNEX 1 BANDA ACEH - LEVERAGING PUBLIC ASSESTS

Banda Aceh, in the extreme west part of Sumatra in Indonesia, was severely hit by the tsunami in December 2004. Thousands of people lost their lives and many more saw their livelihoods wash away with the waves. Although some of the basic infrastructure was rehabilitated thanks largely to international aid, the city is still badly in need of infrastructure in the old central business district (CBD) to help revitalize their economy and improve livelihoods. The city identified three key projects in the CBD:

- Improving the basic infrastructures in the city center, including paving roads and walkways, improving parking, and reordering traffic flow;
- Undertaking wastewater treatment and sewerage rehabilitation to improve the health situation along the along the Krueng Aceh River; and
- Developing an underutilized parcel of land (the Keudah Terminal) for commercial development, with facilities for social service activities and public events.

The first two projects could generate revenue by themselves. However, while the projects could potentially recover their costs, they would not be able to generate a sufficient return to interest potential investors. On the other hand, the real estate development project, if well formulated, could be significantly profitable, but it was unlikely to work well if the other two projects were not developed simultaneously.

The city came up with a unique solution to attract private sector investment, while ensuring that the less profitable infrastructure would also get built. To attract interest from private sector investors, the city retained control over the operation of the wastewater treatment and drainage (the riskiest parts of the investment), but they pushed investors to execute the three components under one project (partial unbundling). In this way, there would be a guarantee that the three components would be executed to the full satisfaction of the investor that cannot identify to the authority responsible for the lack of demand to the area for unexecuted activities.

The city decided to create a Special Administration Unit (SAU), independent from the City Hall, to execute the project. This SAU will have a concession over the use of the Keudah Terminal, which will be leased to the private investor. The revenue obtained from the lease will be used to repay the necessary loans to execute the parts of the project that cannot be handed by the private sector. Once paid, the remaining revenues will be channeled directly to implement new projects and developments in the area, rather than going to the city's general budget.
If successful, this partnership can help provide much-needed infrastructure to promote business in the city center, which in turn could bring wealth to the city and its citizens. However, it should be noted that the partnership has not yet been implemented and specific arrangements are still being finalized.


Figure 14 Banda Aceh Project organization

## ANNEX 2 COMMON ELEMENTS OF FEASIBILITY STUDIES

Proper assessments conducted by both parties will contain the elements described below.
Technical Information. This is the initial definition of the project and will help establish the project's scope and final goals. Solid technical information will eventually help the public authority evaluate proposals made by private developers and investors, whose interests may differ from those of the public authority. For the private investor, a proper technical assessment is also essential to thoroughly understand the intentions of the authority. It also helps them determine whether they have the capability to undertake the project, given the skills of the company, or if they need to acquire or ally with other entities in a consortium.

The information provided should be sufficient to allow the parties to make an initial appraisal of the project's costs and conditions. It should include, at a minimum, the scope of the project, a preliminary design of the solution(s) and alternatives foreseen, and the conditions for ranking and selection.
Cost assessment. A cost assessment is necessary to evaluate the project and the scale of funding required. For the authority this is important to evaluate the size and capitalization of the private investor needed for the project and also to establish what construction bonds or guarantees may be required. The private investor must also evaluate the project from a financial point of view and see how to apply their skills in reducing unnecessary costs or making implementation more efficient.
Demand assessment. Demand assessments are by far the most important and difficult to evaluate. A proper assessment in the demand defines and narrows the scope of the project, along with potential alternatives. In this assessment, accurate and detailed financial models are critical, and all participants should have access to high-quality financial modeling talent.
For the authority, this assessment should be done very carefully. The project can be build economically only if minimum forecast demand levels are met. Demand shortfalls will almost always cause a project to fail financially or will trigger a need for refinancing. ${ }^{18}$
The private investor must make its own demand estimates in order to accurately forecast future revenues and the project's ability to repay debt and provide an adequate risk-adjusted return on investment to its equityholders. Banks approached to lend to a project will also generally conduct their own assessments to confirm that there is enough revenue to service the proposed loans or to request for additional guarantees if necessary.
Once each party knows what they need and want to obtain from the project, the values and costs, and how and when the investment will be repaid, only then can each evaluate their risk and make an informed proposal to the other party.
Financial and economic assessment. Financial studies will show the cash flows of the project and the Profit \& Loss forecasts throughout the life of the project, from which the project's financial viability can be assessed. This information is particularly important for financers to appraise a project's value and ability to repay debt and also for investors to determine the potential revenue and profit from the project. Economic analysis is important for the public sector to justify the project, including any transfers or subsidies required.
Risk assessment. In addition to assessing the risks described in section 2.3, other risk assessments, such as Environmental, Social and Governance ("ESG") guidelines and protocols, may be required by some large international investors.

Regulatory Framework. Although the success of a project is ultimately based upon a specific contract between the public and private partners, the overall regulatory context must be well understood to ensure that the PPP contract does not conflict with any regulations or laws. The specific arrangements for each project must be considered and described.
Environmental impact assessment. These are essential to determine if the project will have the required approvals on environmental issues prior to any bidding process.

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[^0]:    ${ }^{1}$ More literature about the concept and definition can be found at: http://www.adb.org/Documents/Handbooks/Public-PrivatePartnership/Chapter1.pdf, http://www.pppcouncil.ca/aboutPPP definition.asp,

[^1]:    ${ }^{2}$ Collaterizing: Offering an asset as a warranty that a loan will be repaid

[^2]:    ${ }^{3}$ It is important to define control of the project as the control over the business with more or less freedom from the investor to manage different variables and not to be understood as responsibility of the local authority.
    ${ }^{4}$ As stated in section 2.2 above, full privatizations are not to be mistaken for a PPP.

[^3]:    ${ }^{5}$ The term "bankability" refers to a project's attractiveness to bankers and other providers of financing, or to one's ability to "take it to the bank" (and not be shown the door!).

[^4]:    ${ }^{6}$ Infrastructure is not free. It is paid by the citizens. The differentiation is if they are paid by the beneficiaries of the infrastructures (users) or by all the citizens via taxes.
    ${ }^{7}$ For instance, non-driving residents and property-owners in a suburb made accessible by a new toll-highway whose businesses grow and property values rise due to the increased traffic and number of visitors.

[^5]:    ${ }^{8}$ These two stages can be in addition to a public authority's own initial assessment.
    ${ }^{9}$ Detailed guidance on assessment is available from:
    http://www.unescap.org/TTDW/ppp/trainingmaterials.html\#riskidentification

[^6]:    ${ }^{10}$ International advisors' fees generally comprise an initial payment in advance, plus a success fee payable on receiving funds. They are based on the amount of financing they raise.

[^7]:    ${ }^{11}$ For reference, see http://www.unescap.org/ttdw/Publications/TPTS pubs/pub 2308/pub 2308.pdf.

[^8]:    ${ }^{12}$ See https://www.gov.ns.ca/snsmr/muns/fin/pdf-ppp/PPP C4.PDF

[^9]:    ${ }^{13}$ Sample formats for negotiation are to be found at: $h t t p s: / / w w w . g o v . n s . c a / s n s m r / m u n s / f i n / p d f-p p p / P P P ~ C 5 . P D F ~$
    ${ }^{14}$ Detail discussions of how a negotiation team should be setup are: https://www.gov.ns.ca/snsmr/muns/fin/pdfppp/PPP_C4.PDF

[^10]:    ${ }^{15}$ A comprehensive guide on the legal arrangements and provisions for failures can be found at: http://www.unescap.org/TTDW/ppp/trainingmaterials/PPPs LegalWorksheet.pdf

[^11]:    ${ }^{16}$ An interesting approach on how to select these advisors can be found at: http://www.ppp.gov.za/Documents/Manual/Module\%2003.pdf
    ${ }^{17}$ Please see:
    http://web.worldbank.org/external/default/main?theSite $P K=4817374$ \&piPK=64860384\&pagePK=4710368\&menuPK=5117 613\&contentMDK=21759171)

[^12]:    ${ }^{18}$ Examples of traffic shortfalls leading to crisis refinancing abound, ranging from Eurotunnel in UK/France to NOIDA Toll Bridge in India to the Sydney Cross-Harbour Tunnel in Australia.

