

Public Private Partnership Handbook

Supported with funding from:



ACKNOWLEDGEMENT

The Public Private Partnership Authority (PPPA) would like to express its sincere appreciation to the World Bank Group and KPMG for their advice and guidance in the preparation of this PPP Handbook. The PPPA would also like to thank the ministries and agencies that provided valuable inputs to ensure that this PPP Handbook will be a useful and practical source of information on PPPs.

Finally, the PPPA would like to acknowledge the funding provided for this guide by the Public-Private Infrastructure Advisory Facility (PPIAF).



PREFACE

The Government of Bangladesh recognizes the importance of enhancing private sector investment through Public Private Partnerships (PPPs) to support efforts to develop green, resilient and inclusive infrastructure.

Accordingly, the Government has embarked on a systematic effort to develop a strong PPP framework to mobilize private sector capital to support infrastructure development. It passed a PPP Law in 2015 and issued various associated guidelines including on procurement, viability gap funding and unsolicited proposals. It also established the Public Private Partnership Authority (PPPA) as a center of excellence for PPPs in Bangladesh and several long-term infrastructure financing institutions to facilitate PPPs in the country.

The PPPA has been established under the Prime Minister's Office to support sector line ministries/agencies in the identification, development, structuring and delivery of PPP projects to international standards. The PPPA's role is to work in partnership with the national and international investment community, financiers, and civil society to realize the infrastructure needs for Bangladesh.

To ensure that the PPPA can provide the necessary support, there is a need to develop sufficient resources and tools to support the effective implementation of PPP projects in Bangladesh in line with international best practices. To this end, the PPPA has prepared this Public Private Partnership Handbook. The Handbook aims to disseminate good practices in implementing infrastructure projects on a PPP basis, while elaborating the PPP concept and the lifecycle approach of a PPP project. The purpose of this Handbook is to help various stakeholders (both public and private) develop a better understanding of the PPP concept and how PPPs can be leveraged to help deliver infrastructure more efficiently and effectively in Bangladesh.

It should be noted that this Handbook has been developed to provide a basic understanding of PPPs based on international best practices and, as such, has not been designed to explain how PPPs should be implemented in Bangladesh. Instead, a separate PPP Operations Manual is also being developed to accompany the PPP Handbook. This PPP Operations Manual will provide a more detailed explanation of the lifecycle of a PPP project, taking into account the institutional, legal and regulatory framework for PPPs in Bangladesh.

MESSAGE FROM THE PRINCIPAL SECRETARY

It is praiseworthy that the Public Private Partnership Authority (PPPA) has published this PPP Handbook on different aspects of PPP procurement and management. As the Chairman of the PPP Authority, I am thrilled to share this comprehensive guide that sheds light on the complex world of PPPs.

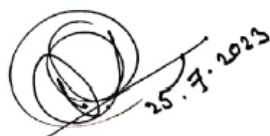
This Handbook will provide PPP practitioners, academicians, and investors with a thorough understanding of the rules, regulations, and procedures governing PPPs in Bangladesh which will serve as an invaluable resource.

PPP is one of the key initiatives of the government led by Hon'ble Prime Minister Sheikh Hasina to transform Bangladesh into a high-income nation by 2041. In this regard, the readers will find a comprehensive overview of the fundamental principles underlying PPPs including procurement processes, contract management, risk allocation, and dispute resolution mechanisms.

This Handbook aims to empower readers with practical tools and guidance to facilitate the planning, implementation, and management of PPP projects. By providing clarity on the rules, regulations, and procedures involved, this book will foster a collaborative environment conducive to sustainable development and economic growth.

I hope that this Handbook proves to be an invaluable asset to your professional activities.

I extend my gratitude to everyone who contributed to the preparation of this Handbook. Together, let us embrace the transformative power of Public Private Partnerships and work towards a better future.



Md. Tofazzel Hossain Miah

Principal Secretary to the Prime Minister
Prime Minister's Office

MESSAGE FROM THE CEO OF THE PPPA

I am delighted that the Public Private Partnership Authority (PPPA) has published the PPP Handbook supported by the World Bank Group with the assistance from KPMG. This Handbook will serve as a very useful guide for the PPPA, the respective line ministries/ divisions and/or the Contracting Authorities in terms of supporting sustainable infrastructure development and enabling Bangladesh to reach its Vision 2041 goals.

I am confident that the PPP Handbook will prove to be an invaluable repository of knowledge and guidance for all stakeholders engaged in PPP projects. Its contents encompass a wide array of significant subjects, including various PPP models, contract structuring, project identification and evaluation, project management, risk management, procurement strategies, contract management and contract termination. It provides a detailed overview of the actions and processes necessary to develop and implement PPP projects efficiently and effectively. To all those embarking on the journey of implementing PPP projects, I encourage you to use this Handbook as a reliable resource. It contains valuable wisdom, proven methods, and practical advice to help all stakeholders navigate the complexities of delivering PPPs.

I am confident that this Handbook will serve as an essential reference for all stakeholders including professionals, policymakers, and researchers, fostering informed decision making and driving the success of future PPP initiatives.

I would like to express my sincere gratitude to everyone who contributed to the preparation of this Handbook. Your commitment and dedication in preparing this Handbook are truly commendable.

Together, we have the power to shape a prosperous future for our beloved nation. Let us enthusiastically embrace the motto, "Bangladesh is growing, be a part of it," as a symbol of our unwavering devotion to contributing to the development of our country.



Dr. Md. Mushfiqur Rahman

Chief Executive Officer (Secretary)

PPP Authority

CONTENTS

1. Introduction	9
1.1. What is a Public-Private Partnership	9
1.2. Traditional Public Procurement vs PPP	10
1.3. Solicited vs Unsolicited Proposals	10
1.4. Common Misconceptions about PPPs	10
1.5. Benefits and Limitations of PPPs	12
1.5.1. Infrastructure Challenges	12
1.5.2. How Can PPPs Help Overcome These Challenges	13
1.5.3. Limitations of PPPs	13
1.6. Typical PPP Delivery Models	14
1.6.1. Types of PPP Contracts	14
1.6.2. Basic PPP Project Structure	16
1.6.3. Key Project Implementation Phases Post Contract Award	16
1.7. Key Stakeholders and Roles	18
1.7.1. Roles and Responsibilities of Key Stakeholders in a PPP Project	18
2. PPP Lifecycle	21
2.1. Overview of the PPP Process	21
3. Project Identification and Screening Stage	26
3.1. Overview of the Project Identification and Screening Stage	26
3.2. Identifying Priority Public Investment Projects	27
3.2.1. Identifying Needs	27
3.2.2. Selecting the Optimal Technical Solution and Conducting a Pre-feasibility Study	28
3.2.3. Scoping the Project	28
3.2.4. Collecting Project-Specific Information	29
3.3. Screening Projects as PPPs	30
3.4. Enhancing Project Readiness	31
3.4.1. Project Management Planning and Governance	31
4. Project Appraisal Stage	33
4.1. Overview of the Project Appraisal Stage	33
4.2. Project Feasibility	34
4.2.1. Technical Feasibility	34
4.2.2. Legal Feasibility	36
4.2.3. Economic Feasibility	36
4.2.4. Environmental Feasibility	37
4.2.5. Social Impact Assessment	38
4.2.6. Commercial and Financial Feasibility	39
4.3. Value for Money (VFM) Assessment	41
4.3.1. VFM Methodology	41
4.4. Fiscal Affordability Assessment	45
5. PPP Structuring Stage	46
5.1. Overview of the PPP Structuring Stage	46
5.2. Project Risk Management	46
5.2.1. Risk Management Cycle	46

5.2.2. Main Project Risks and their Potential Allocation	50
5.3. Contract Design	53
5.3.1. Performance Requirements	54
5.3.2. Payment Mechanisms	54
5.3.3. Adjustment Mechanisms	54
5.3.4. Dispute Resolution Mechanisms	55
5.3.5. Termination Provisions	56
6. PPP Procurement Stage	57
6.1. Overview of the PPP Procurement Stage	57
6.2. Developing a PPP Procurement Strategy	58
6.2.1. Organizing a Procurement Team	58
6.2.2. Selecting the Tender Process	59
6.2.3. Other Critical Considerations	60
6.3. Qualifying Bidders	61
6.3.1. Preparing and Issuing the Request for Qualifications (RFQ)	61
6.4. Managing the Tender Process	62
6.4.1. Preparing and Issuing the Request for Proposal (RFP)	62
6.4.2. Receiving and Evaluating Proposals	64
6.5. Awarding and Signing Contract	64
6.5.1. Awarding and Finalizing the PPP Contract with the Preferred Bidder	64
6.5.2. Contract Signing and Financial Close	64
7. PPP Contract Management Stage	66
7.1. Overview of the PPP Contract Management Stage	66
7.2. Establishing Contract Management Structures	67
7.2.1. Establishing a Contract Management Team	67
7.2.2. Defining Contract Management Procedures and Formulating the Contract Management Manual	68
7.3. Monitoring and Managing Service Performance and Contract Compliance	68
7.4. Managing the Public-Private Relationship	69
7.4.1. Principles of Partnership	69
7.4.2. Stakeholder Management	69
7.5. Dealing with Change	70
7.5.1. Changes in Ownership and Scope of Works	70
7.5.2. Amendments and Renegotiation of Contracts	71
7.5.3. Disputes and Resolution	71
7.6. Contract Termination	72
7.6.1. Termination at the End of the PPP Contract Term	72
7.6.2. Early Termination	73
7.7. Project Hand-back	73

FIGURES

Figure 1.1 Challenges with Infrastructure and How PPPs Can Help	12
Figure 1.2 Spectrum of Private Participation in Public Infrastructure and Services	15
Figure 1.3 Basic PPP Project Structure	16
Figure 2.1 Lifecycle of a PPP Project.....	21
Figure 2.2 Overview of PPP Process	24
Figure 3.1 Overview of the Project Identification and Screening Stage	27
Figure 3.2 Responding to Identified Needs	28
Figure 4.1 Overview of the Project Appraisal Process	34
Figure 4.2 Parameters for Technical Feasibility	35
Figure 4.3 Overview of an Economic Feasibility Study	37
Figure 4.4 Quantitative and Qualitative VFM Assessment	42
Figure 4.5 Simplified Value for Money Example	43
Figure 5.1 Overview of PPP Structuring Stage	46
Figure 5.2 Example of a Qualitative Risk Impact Matrix	48
Figure 6.1 Overview of PPP Procurement Stage	57
Figure 6.2 Steps in One- and Two-Stage Tender Processes	60
Figure 7.1 Overview of PPP Contract Management Stage	66

TABLES

Table 4.1 Qualitative VFM Assessment Tool	43
Table 5.1 Examples of Main Project Risks and their Potential Allocation	50
Table 5.2 Summary of the Potential Allocation of Key Project Risks	53

BOXES

Box 1.1 Bangladesh’s Infrastructure Gap	12
Box 1.2 Payment Mechanisms	17
Box 3.1 Overview of the Project Identification and Screening Stage	26
Box 4.1 Overview of the Project Appraisal Stage	33
Box 5.1 Overview of the PPP Structuring Stage	46
Box 6.1 Overview of the PPP Procurement Stage	57
Box 7.1 Overview of the PPP Contract Management Stage	66

1. Introduction

1.1. What is a Public-Private Partnership

There is no single definition of a Public-Private Partnership (PPP). However, the PPP Reference Guide Version 3¹ defines 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 remuneration is linked to performance*”.

Based on this definition, the main characteristics of a PPP are as follows:

- **Long-term nature:** PPPs are generally long-term in nature, as one key feature of a PPP is the effective transfer of risks and responsibilities to the private party over a substantial portion of the infrastructure asset's lifespan.
- **Contractual engagement:** The government entity delegates risks and responsibilities to the private party detailed in the governing PPP Contract. The PPP Contract should be awarded through a transparent and competitive tender process.
- **Private sector participation:** In a PPP, it is common for a group of private sector parties to form a consortium to bid for the PPP Contract. Upon award, the consortium will typically establish a new Special Purpose Vehicle (SPV) to enter into the PPP Contract with the government entity.
- **Government entity:** The relevant government entity in a PPP is referred to in this Handbook as the Implementing Agency or Contracting Authority. It includes line ministries and agencies that act as the Implementing Agency/ Contracting Authority under the PPP Contract in the name of the government. These entities can be either national or sub-national.
- **Public asset or service:** Under a PPP, the private party provides an asset or service that is traditionally been provided by the public sector. The obligations of the private party under a PPP Contract typically encompass more than just the Design and Construction (D&C) of the infrastructure asset. They also include financing the asset and handling the Operations and Maintenance (O&M) throughout the contract term.
- **Significant risk transfer:** In addition to the more usual transfer of construction risks, there is a substantial transfer of other project related risks (e.g., financing risk, operating risk, demand risk) to the private party over a significant portion of the PPP Contract duration.
- **Significant management responsibility:** The private party is materially and integrally in charge of the management of the asset (especially life-cycle cost management) over the term of the contract.
- **Remuneration linked to performance:** The most effective approach to incentivizing good performance under a PPP is by remunerating the private party based on the asset's performance (the quality of service) and/or level of utilization.
- **Private finance:** For procuring capital-intensive infrastructure projects (e.g., new infrastructure, or significant upgrades or expansions of existing infrastructure), the private party will often be required to provide capital at its own risk to finance part or all of the infrastructure development.

¹ <https://ppp.worldbank.org/public-private-partnership/library/ppp-reference-guide-3-0-full-version>

1.2. Traditional Public Procurement vs PPP

Traditional procurement of infrastructure is the procurement of infrastructure by the public sector primarily financed by the government. The source of funds for such traditional procurement is the public budget. When infrastructure is procured by traditional means, the procuring authority typically assumes the entire responsibility of the asset once construction is completed. While ordinary maintenance tasks are usually contracted out to a private party through a separate contract, the long-term management or life-cycle management (and related risks) remain a direct responsibility of the government or the relevant government entity.

1.3. Solicited vs Unsolicited Proposals

Governments can either proactively identify and procure PPP projects themselves through a 'solicited' PPP process or the private sector can identify a PPP project and propose that project to the government through an 'unsolicited' (USP) PPP process. The advantage of solicited PPP projects is that they typically arise from a robust project identification and screening process that ensures that the projects are aligned with national and/or sector plans and strategies and have been properly structured and prepared as part of a competitive procurement process. With solicited proposals, the government takes the lead in identifying, structuring, and procuring the project. However, with USPs, it is the private sector that typically takes the lead in identifying and promoting the project and a government may find itself at a disadvantage in assessing and negotiating the USP due to information asymmetry (i.e., the situation in which the private sector proponent of the PPP project typically has access to more information and data on the project than the government). The government may also be required to give some bidding advantage to the USP proponent which can potentially undermine the important principle of ensuring competitiveness and transparency in PPP procurement. Unless governments have robust frameworks and processes in place to ensure that USPs are properly assessed and competitively and transparently procured, there is a risk that USPs may result in limited value for money and increased fiscal risks. Therefore, irrespective of whether PPP projects are solicited by the government or proposed by the private sector through an USP, each project should essentially follow the same review and approval process and be tendered transparently and competitively.

1.4. Common Misconceptions about PPPs

There are some common key misconceptions about PPPs held by many stakeholders, especially public sector stakeholders. This section describes and addresses some of these misconceptions about PPPs:

Misconception 1: Privatizations are PPPs

There is a broad range of different PPP contractual delivery modes, but there is often confusion between privatization and PPPs, with many stakeholders viewing PPPs as a form of privatization. However, there is a clear distinction between these two forms of private sector participation. Privatization entails the permanent transfer of a formerly publicly owned asset and the responsibility for delivering a service to the end user to the private sector. In contrast, a PPP involves a long-term finite relationship between a government entity and a private entity, in which the government entity typically remains the legal owner of the underlying asset.

Misconception 2: Government has no exposure to financial or fiscal risks in PPPs

Although there is a significant transfer of risks to the private sector in PPPs, it does not mean that PPPs have no financial or fiscal impact on the government. In certain cases, a government may need to retain those risks that can be better mitigated/ absorbed by the government rather than transferring them to the private sector. These risks (including revenue risk and demand risk) may result in the government being exposed to PPP related fiscal risks.

Further, if the PPP project is not financially viable, public financing (usually in a form of Viability Gap Funding (VGF)) may be required to reduce the overall project costs to the private sector.

Finally, in government-pays PPPs, funding of the service payments in the operations phase is through the public budget.

Misconception 3: Land is sold to the private sector under a PPP

In most PPP contracts, the land on which the facility is constructed is typically retained for public use and is not “sold” to the private sector. Only the right to use the land is granted to the private sector, leaving the government as the ultimate legal owner of the land.

Misconception 4: Governments lose control of the infrastructure asset under a PPP

In most PPP delivery models, the asset is handed back to the government after contract termination. Therefore, the government remains the ultimate owner of the asset.

In addition, the government has an important ongoing role to play across the life cycle of the PPP project, especially in the contract management phase covering construction and operation. A failure by the government to properly monitor the project may compromise project outcomes and even cause a project failure. Therefore, the proactive monitoring of contract performance and ensuring compliance with contract provisions will be critical for the government to achieve a successful PPP project.

Misconception 5: PPP units bypass the sector agencies and ‘take over’ those projects which are implemented as PPPs

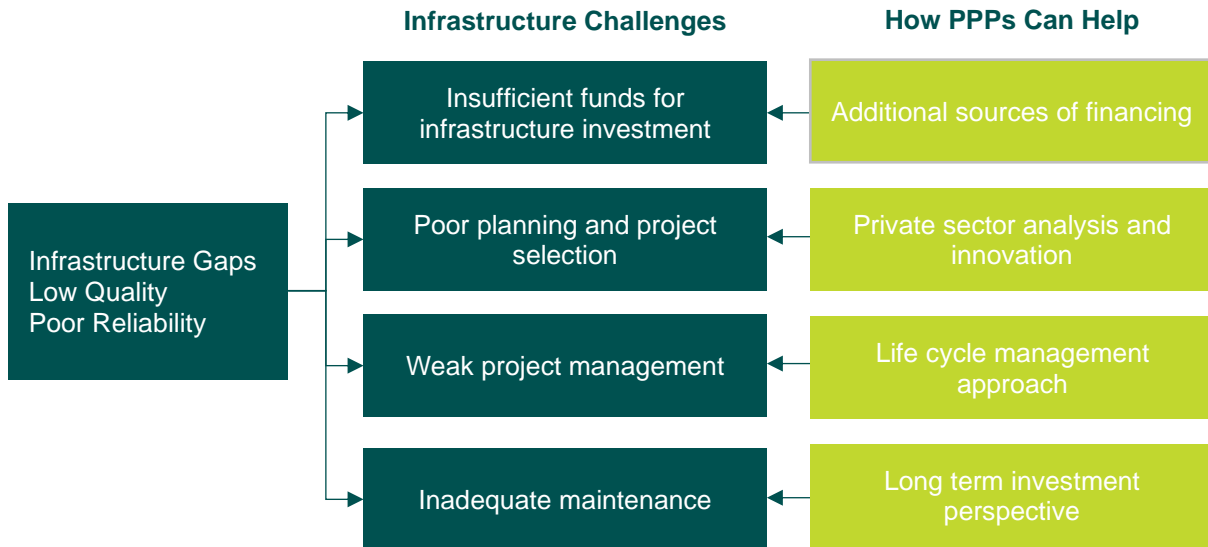
Implementing a project as a PPP should not result in the transfer of the underlying project to a PPP unit. While a PPP unit, as an organization established for the advancement of PPPs, plays a dedicated role in supporting and advising the Implementing Agency/ Contracting Authority in identifying, facilitating, and implementing projects as PPPs, the ultimate responsibility for implementing and managing the underlying PPP project should remain with the respective line ministry or agency that originated the project.

Misconception 6: PPP procurement takes a much longer time than traditional procurement

While procuring a PPP project may take a longer time than traditional procurement, PPP procurement may improve the cost-benefit outcome by incentivizing shorter construction timelines, so that the infrastructure is available and in service sooner than it would have been if it had been procured under traditional procurement.

1.5. Benefits and Limitations of PPPs

Figure 1.1 Challenges with Infrastructure and How PPPs Can Help



1.5.1. Infrastructure Challenges

Infrastructure investment is an essential driver in promoting economic growth, decreasing poverty, creating employment opportunities, and ensuring environmental sustainability. As it generates significant economic and social benefits, the provision of infrastructure services has traditionally been the sole responsibility of the public sector. However, given the rapidly growing demand for infrastructure services and increasing fiscal constraints, many governments are looking at mobilizing private sector finance to provide some of the investment needed to address growing infrastructure gaps.

Specific challenges for governments in delivering infrastructure include:

Insufficient Funds for Infrastructure Investment

The underfunding of infrastructure investment can adversely impact the ability of a country to meet its strategic goals, such as eliminating poverty or ensuring universal access to utilities or healthcare. This problem is particularly prevalent in developing countries as noted in the World Bank report, Closing the Infrastructure Gap (UN 2016)².

Box 1.1 Bangladesh's Infrastructure Gap

The Global Infrastructure Hub (GIH) estimated that the total amount of infrastructure investment required in Bangladesh is USD 608 billion by 2040, while the total amount of infrastructure investment available from various source will only be around USD 417 billion (based on 2017 trends), leading to an overall infrastructure investment gap of USD 191 billion.

² UN. 2016. "Closing the Infrastructure Gap: The World Bank Group." Issue Brief Series. New York: United Nations, Inter-Agency Task Force on Financing for Development.

Poor Planning and Project Selection

Scarce resources are frequently directed towards poorly selected projects that may not yield benefits proportionate to their costs. Consequently, this can lead to underutilized assets and sub-optimal service delivery at a higher-than-necessary cost.

Weak Project Management

The quality of infrastructure service delivery by government is often constrained by limited capacity and weak management incentives. Inefficiency and ineffectiveness of the public sector in managing infrastructure construction projects and service delivery often results in increased costs and poor service delivery.

Inadequate Maintenance

Infrastructure assets frequently receive inadequate maintenance, either due to poor planning or postponement of planned maintenance due to budget constraints. Conducting regular maintenance is a more cost-effective approach to keeping infrastructure assets in an optimal condition, rather than allowing their quality to deteriorate necessitating major rehabilitation work.

1.5.2. How Can PPPs Help Overcome These Challenges

Provided that PPPs are properly structured and procured in a transparent and competitive manner, PPPs can potentially provide governments with the following benefits:

- **Access to private sector finance:** One of the main benefits of PPPs is that they can relieve pressure on a government's budget, by providing an alternative source of financing for infrastructure.
- **Access to better technology, skills and resources:** The private sector typically has superior access to technology and resources that can be utilized to provide better PPP outcomes. Moreover, the output-oriented nature of PPPs incentivizes the private sector to introduce design and operational innovations and efficiencies that may not be readily accessible within the public sector.
- **Allocation of certain risks to the private sector:** Under traditional procurement, the public sector will typically bear all the risks of the project. However, under a PPP, many of these risks can be transferred to the private sector which helps drive a VFM outcome for the government.
- **More efficient delivery:** Under a PPP arrangement, the private sector is compelled to take a whole life cycle approach to the design, construction, operation and maintenance of the project, to manage life cycle costs more effectively. In particular, PPPs use an "output" based approach, rather than an "input" based approach, which is more commonly used under traditional public sector procurement. Under an output-based approach, the public sector specifies the outputs it wants to achieve, and it is then up to the private sector to decide how best to meet these outputs.
- **More cost-effective delivery:** The combination of competitive procurement for PPPs and the whole life cycle approach, has the potential to deliver infrastructure at a lower overall cost than through public sector delivery.

1.5.3. Limitations of PPPs

While PPPs can provide benefits, there are also potential limitations associated with PPPs that governments need to be aware of:

- **Not all projects are suitable to be procured as a PPP:** Many governments erroneously assume that all infrastructure projects can be implemented as PPPs. However, this is not the case, as some projects may not be suitable for PPP procurement. For example, some projects may be perceived as being too risky from a private sector perspective, while other projects may

be in sectors where there is either limited public acceptance of the role of the private sector in delivering services in that sector or the private sector may have very limited experience in delivering services in that sector.

- **PPP projects typically take longer and are more costly to prepare than traditionally procured projects:** PPPs are significantly more complex and incur higher transaction costs than traditional procurement methods. Therefore, there is a risk in allocating resources to developing projects that may eventually prove to be unsuitable for procurement as PPPs.
- **Poor project preparation can significantly undermine a project's VFM proposition:** Proper project preparation is important to optimize VFM and increase the probability of a successful procurement. However, governments sometimes do not have the necessary resources or experience to properly prepare projects to ensure that they are not only bankable, but also provide VFM.
- **The public sector may take on too many risks that it is not able to manage properly:** One of the key features of PPPs and a driver of VFM, is the sharing of risks between the government and private entities. However, during the negotiations over risk allocation, governments may agree to take on too many risks, thus adversely impacting the value for money of the project.
- **A PPP project may not be financially viable without government support which creates fiscal risks:** Ideally, only economically and financially viable projects should be pursued through the PPP approach. However, there can be instances where projects have strong economic viability but weak financial viability. Therefore, to improve the financial and commercial viability of the project, a government may decide to provide some form of support. However, it is important to note that any financial support provided by the government, such as an availability payment or a minimum revenue guarantee, will create long term fiscal commitments and contingent liabilities that need to be properly managed.

1.6. Typical PPP Delivery Models

1.6.1. Types of PPP Contracts

A key feature of a PPP Contract is that it bundles multiple project phases or functions. However, the functions for which the private party is responsible for will typically vary depending on the type of asset and service involved.

Typical functions include:

- **Design:** involves developing the project from initial concept and output requirements to construction-ready design specifications.
- **Build or Rehabilitate:** when PPPs are used for 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 rehabilitating or extending the assets.
- **Finance:** the private party is typically required to finance all, or part of the necessary capital expenditure involved in the building or rehabilitation of the infrastructure asset.
- **Maintain:** PPPs assign responsibility to the private party for maintaining an infrastructure asset to a specified standard over the life of the contract.
- **Operate:** the operating responsibilities of the private party to a PPP can vary widely, depending on the nature of the underlying asset and the associated services being provided.

PPP contracts can be structured in various ways to address the different nature and risk allocation of infrastructure projects. The following identifies some of the key contractual types:

Build-Operate-Transfer (BOT)

Under the Build-Operate-Transfer (BOT) approach, the private party constructs the asset to the output specifications set by the Implementing Agency/ Contracting Authority; operates the asset for the period specified in the contract; and then transfers the asset back to the Implementing Agency/ Contracting Authority at the end of the contractual period.

Design-Build-Finance-Operate-Maintain (DBFOM)

Under a Design-Build-Finance-Operate-Maintain (DBFOM) arrangement, the project scope for designing, building, financing, operating, and maintaining the asset is bundled and given to the private party to deliver. Under a DBFOM contract, the private party is regarded as the “owner” of the asset only in economic terms. However, the asset often remains, in legal terms, owned by the government.

Build-Own-Operate (BOO)

Under a Build Own Operate (BOO) structure, the private party contractor constructs and operates the asset in perpetuity, without ever transferring ownership to a government entity. The legal title to the facility remains with the private sector, and there is no obligation for the public party to purchase the facility or assume the title, at the end of the contract period.

Management Contract

Management Contracts can be divided into two categories:

- “At-risk” long-term management or service contracts that can be regarded as PPPs; and
- Contracts that are regarded as traditional O&M or service contracts.

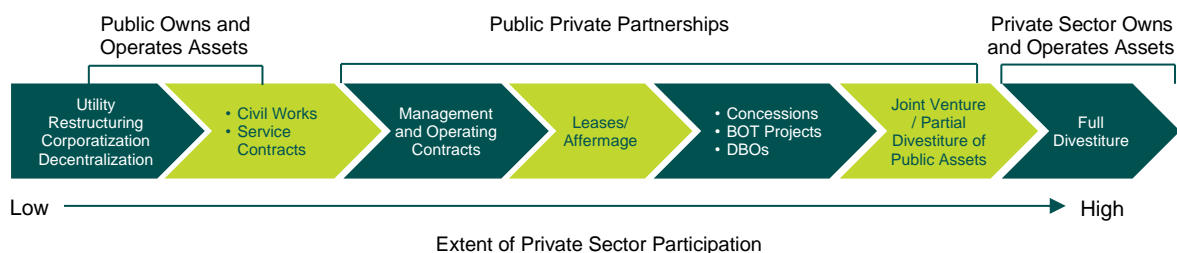
Contracts which have a scope of only maintaining or operating the asset or a service may be regarded as PPPs, as long as they transfer significant risks from the Implementing Agency/ Contracting Authority to the private party; the payments are performance oriented, and the contracts have relatively long terms.

Affermage Contract

Affermage Contracts are generally classified as PPPs where the private party is responsible for operating and maintaining the infrastructure asset, but not for financing the investment. Affermage Contracts are usually chosen by the Implementing Agency/ Contracting Authority to combine public financing with private sector efficiency. Compared with traditional public procurement, greater commercial risks such as user charge collection risk are transferred to the private party under Affermage Contracts with incentives to perform. The private party operator takes some degree of asset risk in terms of the performance of the assets, as the costs of maintenance and some replacement costs are passed to the private party operator.

In addition to the PPP contractual types highlighted above, there are a number of other PPP contract types (see Figure 1.2) which are essentially variations of these contracts. The decision as to which contract type to use will depend on several factors, including the nature of the asset, government objectives and the underlying risk allocation.

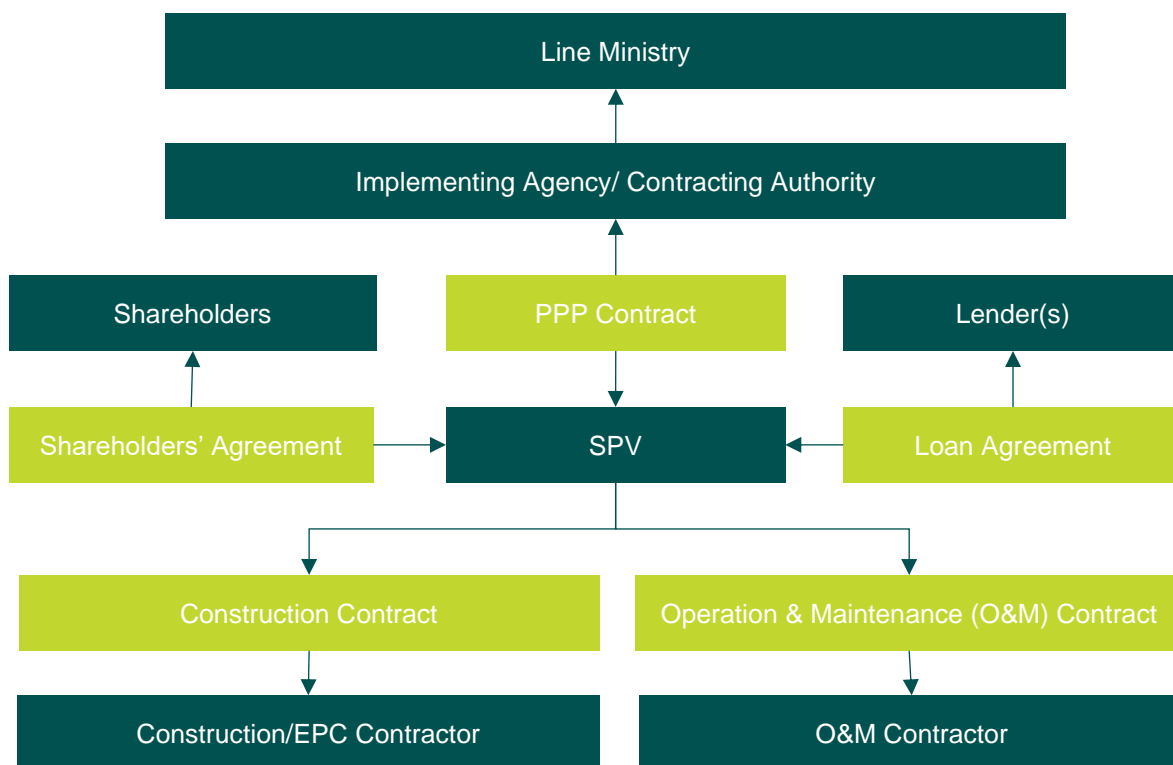
Figure 1.2 Spectrum of Private Participation in Public Infrastructure and Services



1.6.2. Basic PPP Project Structure

The project “structure” refers to the contractual relationships and cash flows underpinning the project.

Figure 1.3 Basic PPP Project Structure



1.6.3. Key Project Implementation Phases Post Contract Award

Phase 1: Contract Award and SPV Establishment

Following a tender and evaluation process, the government will award the PPP project to the successful bidder, which will typically be a consortium made up of several companies. After awarding the contract, the consortium will establish a Special Purpose Vehicle (SPV) if it has not done so already. The SPV is the party that will enter into the PPP Contract with the Implementing Agency/ Contracting Authority.

Phase 2: SPV Mobilization

The SPV will typically execute a number of other contracts (besides the PPP Contract) including:

- Financial agreements: these are the various loan financing agreements by which the SPV raises financing to help pay for the capital expenditure (CAPEX) of the project.
- Engineering, Procurement and Construction (EPC) and Operating and Maintenance (O&M) contracts: these contracts are entered into with construction and operation and maintenance contractors to deliver the asset and the services required under the PPP contract.
- Guarantee agreements for the performance bond; and
- Insurance agreements and policies.

Phase 3: Construction

Construction typically starts when the Implementing Agency/ Contracting Authority issues a Notice to Proceed (NTP) for the construction to start. This occurs once final project design is approved, and all the pre-conditions set by the Implementing Agency/ Contracting Authority have been met.

The contractor is typically paid on a milestone basis as agreed under the Construction Contract. The construction works will be reviewed by technical advisors appointed by the lenders and the independent engineer appointed by the Implementing Agency/ Contracting Authority. To guarantee appropriate construction performance to the SPV and lenders, the construction contract will require the construction contractor to provide security, such as performance bonds, bank guarantees and/or parent company guarantees.

Phase 4: Operation

In most projects, the Implementing Agency/ Contracting Authority will only authorize the commencement of operations once the independent engineer has signed off that construction has been completed in accordance with the PPP Contract. Once the project commences operations, the project will typically start to generate cashflows either from end user fees (e.g., tolls or tariffs) or from unitary payments (i.e., availability payments from the government).

With these cashflows, the SPV can then start to pay its 'running' costs which typically include O&M fees to O&M contractors, principal and interest payments to lenders, taxes and dividends.

Box 1.2 Payment Mechanisms

PPP payment mechanisms can be divided into three categories, namely, User-Pays PPPs, Government-Pays PPPs and Hybrid Payment PPPs:

- **User-Pays PPP:** Under a user-pays PPP, project revenues are provided by the users of the asset, and the private party assumes part, or all of the demand risks associated with the user payments. Examples include tolls collected by the private party in a toll-road project or fares paid for privately-operated transit services. Alternatively, tolls or fares can be paid directly to the government, who then transfers them to the private party.
 - **Government-Pays PPP:** Under a government-pays PPP, project revenues are generated from government payments, and the government bears the demand or market risk. While a government-pays PPP is common in social infrastructure projects (for instance, hospital and school projects), it can also be applied to economic infrastructure projects. These payments can be linked to usage (based on volume) or availability (dependent on the provision of a specified quality of asset or service). In either case, the payment mechanisms are usually tied to performance, effectively transferring operating risks to the private party.
 - **Hybrid Payment PPPs:** A hybrid payment mechanism can include both user payments and government payments. For example, the total revenue generated by user charges might be insufficient to achieve the required cashflows. In such case, the government may choose to also provide direct financial support to ensure the commercial feasibility of the PPP project. One of the most common types of support is the provision of direct government payments to the SPV. When the payments are granted as complementary service payments to user payments made over the operating period of the contract, it constitutes what is known as a hybrid payment mechanism.
-

Phase 5: Hand Back

At the end of the term of the PPP Contract, the infrastructure asset will typically be returned to the government. The government may choose to re-tender the management of the asset under a new contract, contract only the O&M component of the asset under a series of shorter-term contracts, or directly manage the asset itself. It is good practice to clearly specify in the PPP Contract the conditions under which the private party is to hand back the infrastructure asset.

1.7. Key Stakeholders and Roles

Given the complexity of PPP projects, there are several stakeholders that play significant roles in the implementation of PPP projects and, as such, it is important to not only ensure that each stakeholder is aware of its responsibilities and obligations, but also that these stakeholders effectively coordinate with each other when necessary.

1.7.1. Roles and Responsibilities of Key Stakeholders in a PPP Project

Financing Ministry

The finance ministry is central to PPPs. Finance ministry involvement helps ensure, inter alia, that the PPP project is focused on achieving Value for Money and that fiscal risks are properly assessed and managed.

- **Project approval:** The finance ministry usually plays a gateway role in the approval process. At several stages, the finance ministry may assess whether a PPP project is affordable and provides Value for Money.
- **Public financial management:** The finance ministry needs to make sure that there is sufficient fiscal space to fund direct liabilities and deal with situations where contingent risks allocated to the public sector materialize into fiscal expenditures.

Central PPP Unit

The Central PPP Unit is a repository of the skills and experience necessary to support the Implementing Agency/ Contracting Authority in implementing PPP projects. It is often housed in one of the central agencies such as the Ministry of Finance.

- **Control and oversight of the PPP process:** The Central PPP Unit ensures that the correct processes are followed in developing a PPP and that the analysis of a proposed PPP is comprehensive, so that the project is not only consistent with the pre-determined appraisal criteria, but also that all required approvals are obtained.
- **Advising and supporting the implementation of PPPs through best practice approaches:** The Central PPP Unit can offer experience and specialist skills that may not be available within the Implementing Agency/ Contracting Authority through its focus on PPPs and involvement in numerous projects across sectors.
- **Providing communication channels to investors:** The Central PPP Unit can provide bidders and financial sponsors with information about the existing pipeline of PPP projects and the PPP procurement process and requirements. The Central PPP Unit is often responsible for developing a national level potential PPP project pipeline across sectors, which helps to increase investors' visibility of upcoming PPP opportunities.
- **Monitoring and support after financial close:** The Central PPP Unit can assist the Implementing Agency/ Contracting Authority with contract management, and ensuring critical information is communicated with relevant central agencies (such as the Ministry of Finance) that need to be aware of changes in the PPP's risk status to monitor the project's contingent liabilities.

Implementing Agency/ Contracting Authority

The Implementing Agency/ Contracting Authority is the government entity that enters into PPP contracts and is responsible for PPP implementation. Its main responsibilities at various stages of the PPP lifecycle include the following:

- **Identifying and appraising projects:** The Implementing Agency/ Contracting Authority takes the lead in identifying potential PPP projects in its sector, which may then be included in the Public Sector Investment Plan (PSIP) of the government. It is also responsible for preparing project proposals and submitting proposals for the approving authority's final approval.
- **Structuring and procuring PPPs:** The Implementing Agency/ Contracting Authority is responsible for structuring PPP projects and undertaking the procurement of the PPP projects.
- **Managing PPP contracts:** The Implementing Agency/ Contracting Authority ensures the successful implementation of PPP projects after contract award through the proactive management of the PPP contracts across the project construction, operation, and hand back phases.

In some jurisdictions, a central planning or other infrastructure focused agency may take the lead in identifying and championing projects that are suitable to be developed as PPPs. Such agencies may also run the procurement on behalf of the sector or the local authority.

External advisors may be appointed to support and supplement the skills available in-house.

SPV/ Private Party

The private party, usually in the form of a SPV, plays the role of developing and managing the project. Its main responsibilities include the following:

- **Sourcing and managing capable subcontractors:** It is important that the SPV sources capable subcontractors and passes through the rights and obligations under the concession contract through a downstream structure of "back-to-back" contracts, allocating responsibilities, obligations, risks, and cash flows from the SPV to the different private subcontractors through different agreements. The construction/ EPC and O&M subcontractors are often shareholders of the SPV.
- **Undertaking necessary due diligence and bid submission:** At the PPP procurement stage, the SPV, together with the subcontractors, will undertake the due diligence necessary for preparing and submitting the bid which will include the proposed preliminary technical design and financing plan.
- **Obtaining project financing for construction and delivering the project:** After the awarding and signing of the contract, the SPV will assume the obligations stated in the contract, including financing the development costs, finalizing the design of the infrastructure asset and constructing the asset.
- **Delivering the contracted services:** Once construction is completed and the works are commissioned, the SPV operates and maintains the asset, ensuring its adherence to the agreed performance standards. At the end of the operation/ contract period, the SPV will hand the asset back to the government in a condition that has been agreed in the contract.

Lenders

The lenders provide financing to the PPP project in the form of debt. The main responsibilities of lenders include the following:

- **Providing financing for the project:** Lenders provide debt financing to infrastructure projects commonly via loans. The lenders are usually commercial lenders, institutional investors, export credit agencies, bilateral or multilateral organizations, and sometimes the host country government.

- **Providing an additional level of scrutiny on the financial viability of the project:** Before signing loan agreements, due diligence is usually required by the lenders and is typically undertaken by lenders with the support of external legal, technical, and financial advisors hired by the lenders. Based on this due diligence, a comprehensive bankability assessment is conducted by lenders according to their internal evaluation system to ensure that the project to be financed is bankable.
- **Monitoring the project's performance:** During the term of the loan agreement, the lenders will typically exercise a tight control of all cash flows, including limiting the ability of shareholders to distribute dividends. The project's financial performance and cashflow payments are strictly monitored by the lenders to ensure the satisfaction of various debt covenants including the Debt Service Coverage Ratio, Loan Life Coverage Ratio and the terms of the cashflow waterfall agreed with the SPV and shareholders.

Subcontractors

The various subcontractors (including construction contractors, O&M contractors, and other subcontractors) will typically have to meet those contractual obligations transferred to them by the SPV, including the following:

- Delivering the construction of the project according to the contract.
- Operating and/or maintaining the project according to the contract.
- Performing other duties as specified in the PPP Contract.

End Users (where relevant)

- Paying for usage of services through user charges.
- Providing feedback on the quality of services delivered.

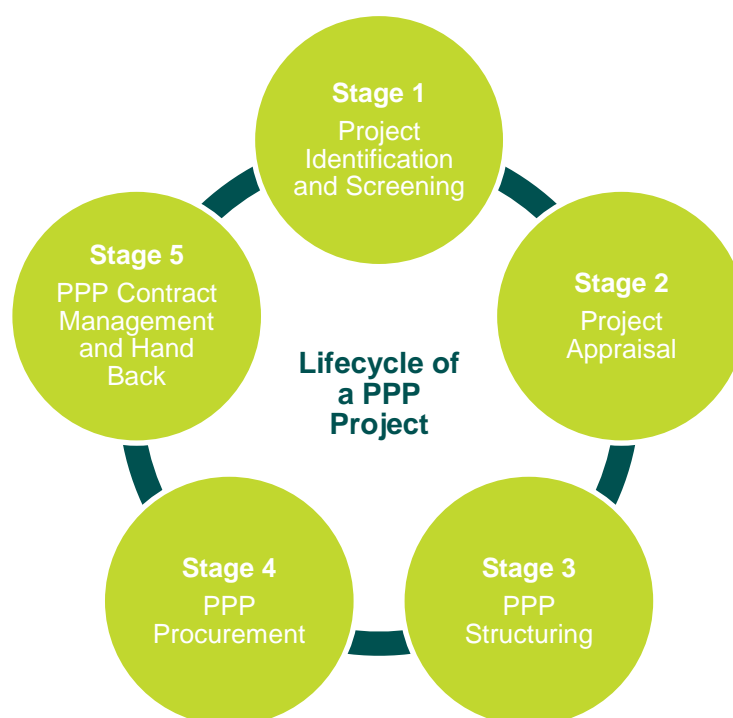
2. PPP Lifecycle

2.1. Overview of the PPP Process

This section introduces the key objectives and main tasks that should be considered by the government at each stage across the PPP lifecycle. More details on the objectives and specific tasks at each stage are provided in the subsequent chapters.

The lifecycle of a PPP project can generally be considered to have five stages:

Figure 2.1 Lifecycle of a PPP Project



Stage 1: Project Identification and Screening



Objective:

To identify priority public investment projects with the most appropriate technical solution and to pre-assess the suitability of the project as a potential PPP.

This will entail:

- Identifying public needs and evaluating and selecting the best technical solution from among several alternatives to meet the identified needs.
- Determining the project's scope based on the technical solution selected.
- Evaluating the project's economic viability, potentially including a socio-economic assessment through a prefeasibility study.
- Assessing the project's suitability as a potential PPP.
- Establishing a project governance framework for the preparation process leading up to the tender launch, including creating a project management plan and identifying the project team.

Stage 2: Project Appraisal



Objective:

To assess whether the project is feasible as a PPP and can be structured in a way that mitigates the risk of project failure during tender or during the contract life of the project.

This will entail:

- Assessing the project's feasibility taking into account the project's technical, legal, economic, environmental and social, and commercial and financial aspects.
- Determining whether developing the project as a PPP generates a Value for Money outcome.
- Assessing the affordability of the project to end users and/or the government in terms of direct and indirect fiscal commitments and contingent liabilities.

Stage 3: PPP Structuring



Objective:

To define and develop a PPP contract solution that best fits with the specific features of the project and delivers VFM.

This will entail:

- Managing the risks in a PPP project through a robust process of risk identification, prioritization, mitigation, allocation, and structuring.
- Defining the final structure of the project (including financial structuring, risk allocation, payment mechanisms) and outlining the key terms of the PPP Contract.

Stage 4: PPP Procurement



Objective:

To manage the process to select the best value proposal in a competitive and regulated environment and execute the contract with the most suitable and reliable bidder.

This will entail:

- Preparing the Request for Qualification (RFQ) that defines the qualification criteria and subsequently qualifying the bidders.
- Preparing the Request for Proposal (RFP) that sets out the proposal requirements, the terms and conditions of the project and the submission requirements for the proposal.
- Launching the tender and managing the tender process, including providing clarifications and conducting tender workshops.
- Evaluating and negotiating proposals.
- Awarding and signing the contract and achieving commercial and financial close.

Stage 5: PPP Contract Management and Hand Back



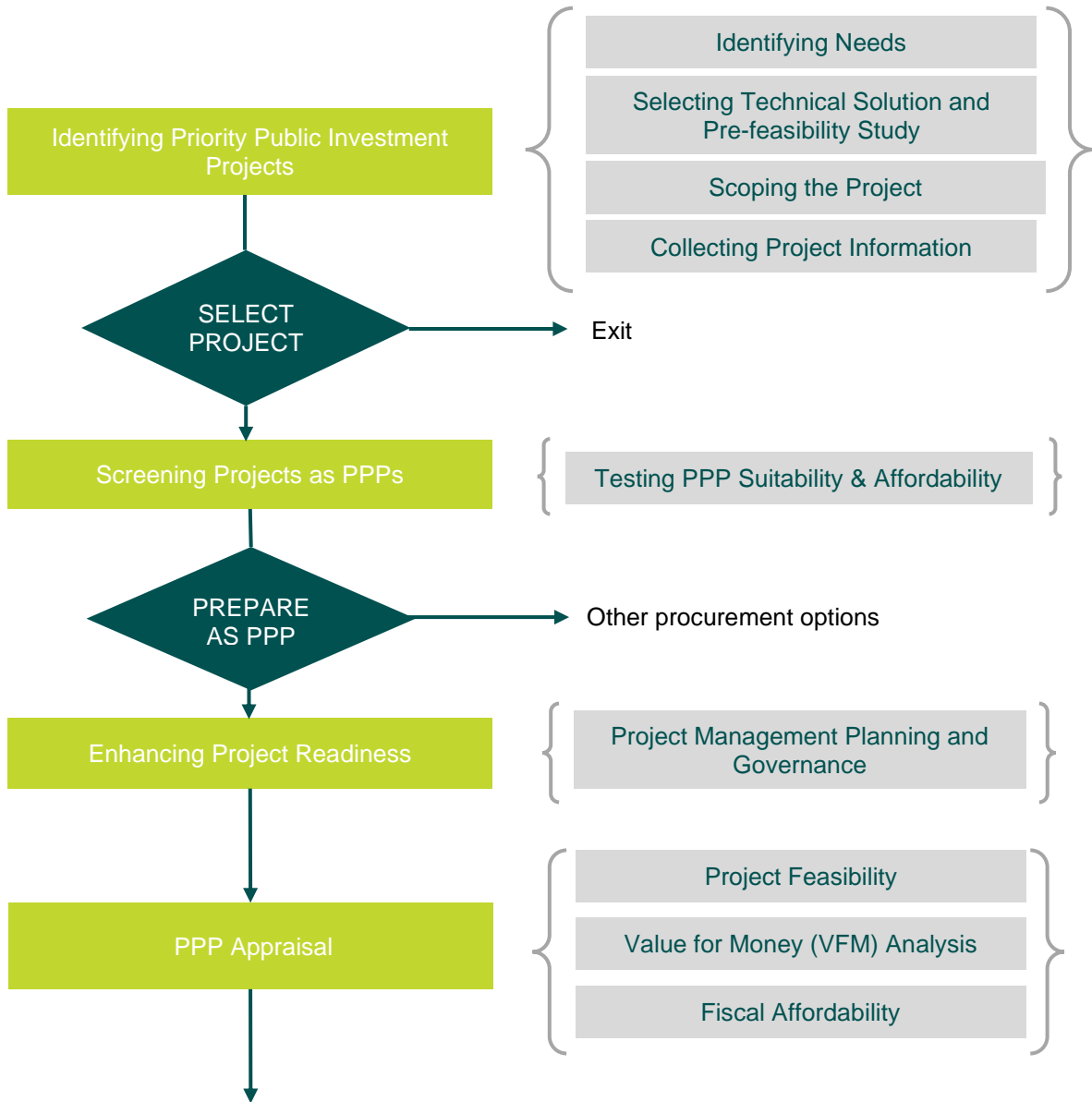
Objective:

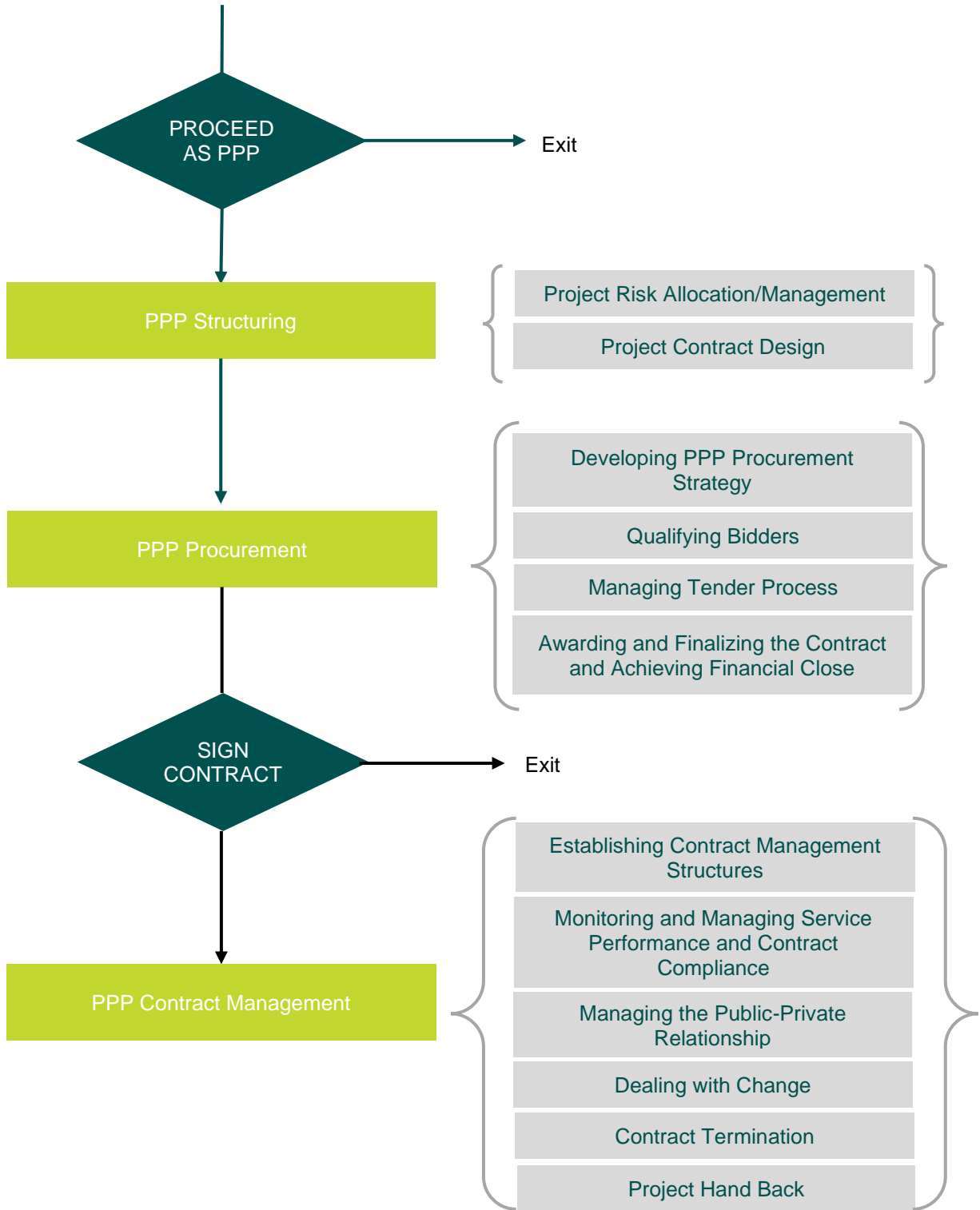
To ensure that the project is implemented and handed back (if required) in accordance with the contract.

This will entail:

- Establishing a governance framework, including a contract management team.
- Establishing and executing contract administration, including the development of a contract management manual.
- Monitoring the private party's compliance and performance and imposing penalties for poor performance in accordance with the terms of the contract.
- Managing communication with stakeholders.
- Managing contract changes and disputes.
- Managing the transition of assets and operations at the end of the contract term, to include carrying out a technical audit of the asset and equipment and, where necessary, agreeing rectification or compensation with the SPV.

Figure 2.2 Overview of PPP Process





3. Project Identification and Screening Stage

3.1. Overview of the Project Identification and Screening Stage

Box 3.1 Overview of the Project Identification and Screening Stage

This section covers the following topics for the Project Identification and Screening Stage of projects to be developed as PPPs:

- Identifying priority public investment projects (as initial candidates for PPPs)
 - Screening identified projects for their potential to be developed as PPPs
 - Preparing projects for the next stage of PPP Appraisal
-

Identifying Priority Public Investment Projects

Most governments will have a public investment management (PIM) or similar framework in place to enable the government to identify and prioritize projects to be included in a Public Sector Investment Plan (PSIP).

The process of identifying priority public investment projects usually includes (i) an identification of the “needs” of the public in terms of infrastructure services, (ii) the selection of a technical solution in the form of an appropriate infrastructure development, (iii) the definition of the technical scope, and (iv) an initial assessment of the project through a Pre-feasibility Study. The relevant ministries and agencies then develop a pipeline of projects that they wish to implement and submit the pipeline to a central planning department for review and prioritization in the Public Sector Investment Plan.

Screening Projects to Assess their PPP Potential

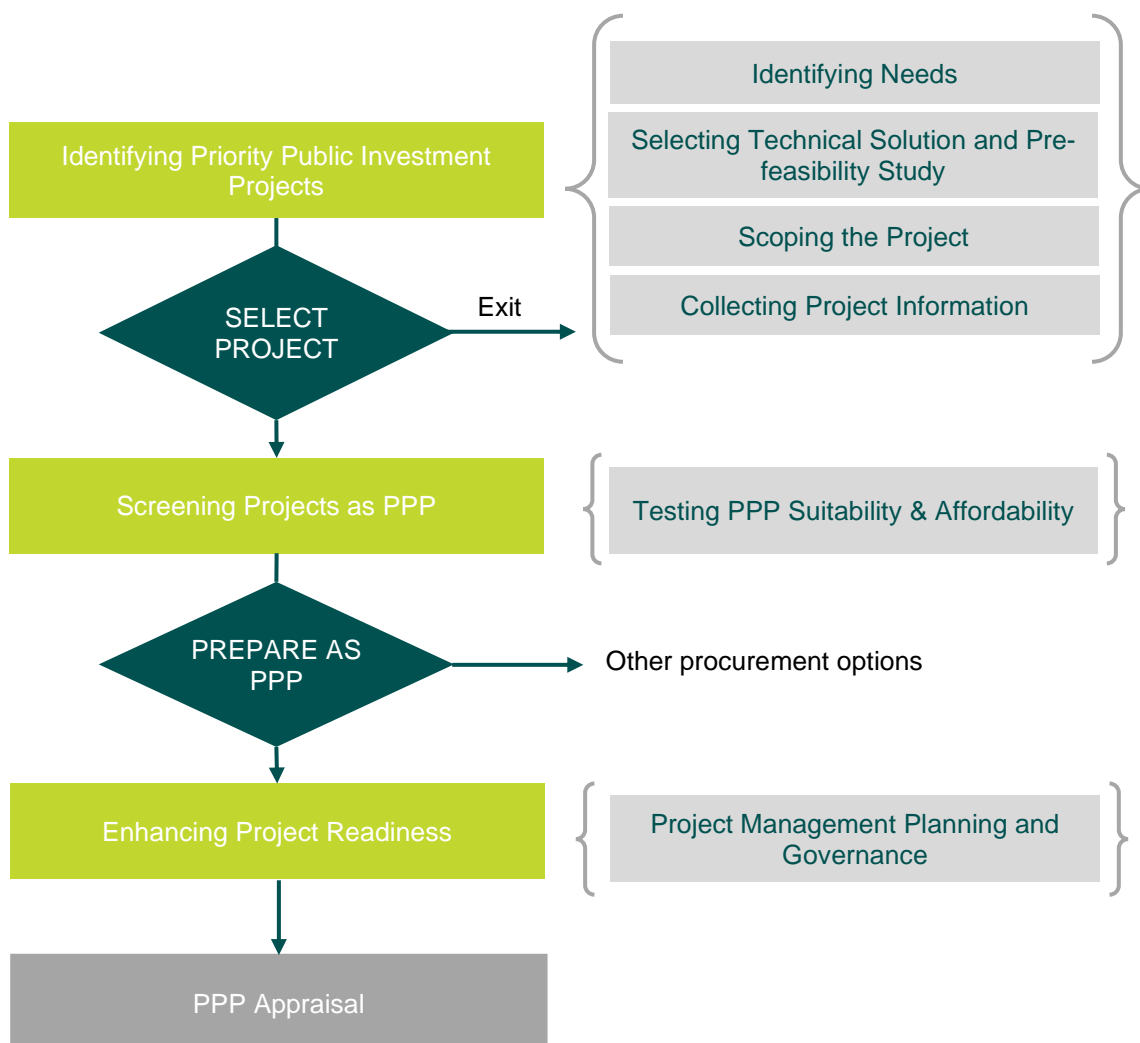
It is important that governments put in place a consistent and transparent screening process to screen the projects within the Public Sector Investment Plan to determine if any of the projects have the potential to be procured through a PPP.

The screening criteria applied typically include: (i) the suitability of the legal framework to support PPPs in the sector, (ii) size and cost of the project, (iii) opportunity for risk transfer, (iv) past track record (if any) of PPPs in that sector, and (v) the affordability of the project to the government and end users.

Enhancing PPP Project Readiness

Once a project has been identified as having the potential to be procured as a PPP, the project will then usually require a project management planning and governance strategy to enhance the readiness of the project before moving on to the Project Appraisal Stage. The project management plan is developed to define (i) the work program and schedule for the pre-procurement work, (ii) the approach to stakeholder engagement, (iii) the team structure (including a staffing plan), as well as (iv) other project related governance strategy matters.

Figure 3.1 Overview of the Project Identification and Screening Stage



3.2. Identifying Priority Public Investment Projects

As part of their overall planning responsibility, it is important that governments are able to identify and prioritize public investment projects that meet public needs. The optimal technical solution to meet the public's need has to then be identified based on a high-level definition of the infrastructure development needed. For instance, the healthcare requirements for a community can be met through the development of a community hospital.

After selecting the technical solution, the project's scope is further defined with an initial pre-feasibility assessment conducted.

Relevant project information is then collected to enable the screening of the project for its PPP suitability.

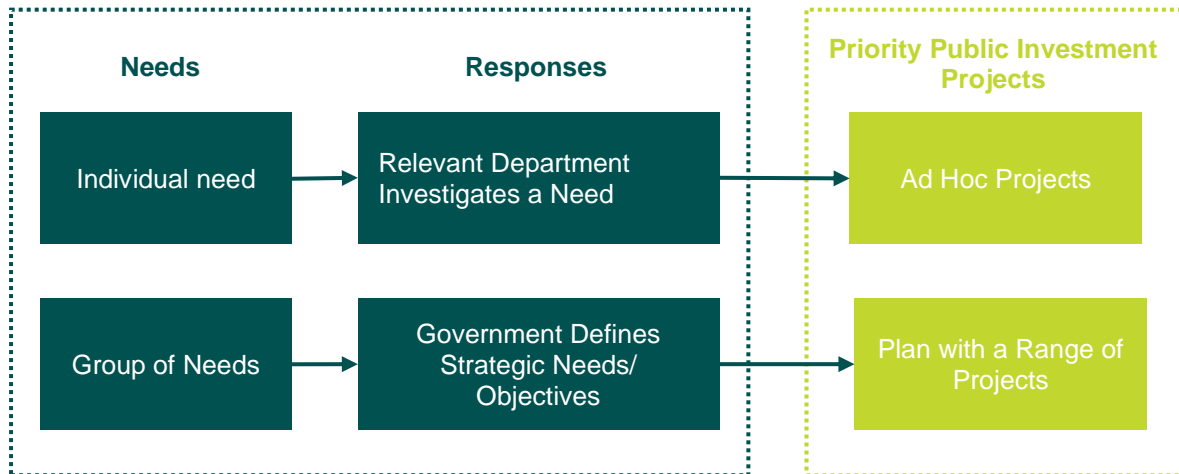
3.2.1. Identifying Needs

Governments typically have a standard public investment planning process to identify infrastructure projects that are required to be developed to address public needs. Such plans are usually developed by the relevant ministries or agencies in line with broader government policy objectives. The identified projects should respond to the needs of the public and can either be identified on an individual project basis, or form part of a broader development masterplan based on a sector or region.

These projects are assessed and then, in line with the needs and policy priorities of the government, are subject to a prioritization process; with the selected projects typically forming the basis of a pipeline of public investment projects that can be considered for PPP delivery.

National and subnational climate policies and goals should also be taken into consideration when developing the public investment plan. Here, the identified need should be to reduce national emissions and adapt to the impacts of climate change. To achieve these strategic objectives, public investment projects need to be identified in line with specific commitments described in national climate action plans, if available.

Figure 3.2 Responding to Identified Needs



3.2.2. Selecting the Optimal Technical Solution and Conducting a Pre-feasibility Study

To meet the public’s needs, the government will have to determine the most appropriate technical solution. This involves the identification of the physical infrastructure needed and the associated services required to be provided with the infrastructure asset. The minimum service quality and standards to best address the identified needs are also determined at this stage.

In the selection of the best technical solution, cost implications are also considered as the government needs to ensure that the proposed technical solution is affordable to the government and/or end users and is economically viable. To help assess this, a Pre-feasibility Study and an initial Cost Benefit Analysis (CBA) are undertaken to ensure that the overall benefits to society are higher than the costs to the public for the project.

In addition, the technical solution should also address the potential climate risks faced by the project (e.g., flood risks for a road project, rainfall pattern for a hydropower project, etc.). Based on a pre-assessment of climate risks, the hazard level and the project’s exposure to these hazards can then be properly assessed, so that the technical design of the project can then be adjusted to mitigate such risks.

3.2.3. Scoping the Project

After defining the optimal technical solution, the project scope is defined. This entails the development of a detailed description of the project, that covers aspects such as the sector, physical characteristics of the project (including the nature, size and scale of the project, technology to be implemented etc.), location and the environmental and social (E&S) and climate change impacts of the project.

The technical scope also defines the services that are to be delivered by the government and by the private party to meet the project objectives.

3.2.4. Collecting Project-Specific Information

The project-specific information and data required for the Pre-feasibility Study, initial CBA and later for the PPP screening, should include the following:

Project Objectives

- Explanation about the project's 'fit' in relation to the national and sector level policies/ strategic plans; and
- Description of the 'need' being addressed by the project, including economic impact factors and socio-economic benefits of the project.

Project Description

- The agency responsible for the delivery of the project;
- Sector and preliminary technical features of the project (for instance, location and length of kilometers for a road project);
- Preliminary capital expenditure estimates;
- Options and suitability of the proposed solution, including comparison with alternative technical solutions;
- Affected area/population; and
- Site/ land availability.

Commercial Considerations

- Construction and operation terms;
- O&M cost estimates (including lifecycle/ refurbishment costs incurred over the term of project);
- Consideration of whether user fees can be charged for the project; and
- Demand and revenue estimates.

Environmental, Social, Climate and Gender Considerations

- E&S and climate change impacts;
- Opportunities for climate change mitigation or adaptation; and
- Potential for generating jobs, including opportunities for increased female participation in the workforce.

Project Readiness

- Studies (if any) that have already been carried out or are being prepared; and
- Other relevant information, for example, in relation to the project's suitability for PPP procurement, economic soundness, project readiness, and risk of failure in terms of project delivery/implementation.

3.3. Screening Projects as PPPs

After selecting the optimal technical solution and assessing the cost implications through a Pre-feasibility Study and an initial CBA, it is important to screen all the projects in the Public Sector Investment Plan to determine whether a project has the potential to be delivered as a PPP.

Additionally, it is necessary at this stage to have at least an initial idea of which PPP mode the project is likely to be best suited to.

Screening projects for PPPs typically involves a PPP suitability and affordability analysis.

The PPP suitability analysis is typically performed based on six parameters:

- **Size and cost of the project:** Is the project of an appropriate size to be implemented as a PPP in terms of scope and costs? Have there been projects of a similar size, scope and cost successfully delivered in the past as PPPs either domestically or in similar jurisdictions?
- **Suitability of legal framework:** Can the project be delivered as a PPP within the country's existing legal framework?
- **Identified outputs:** Is the desired service outcome well defined and can it be used to scope out the project? Are the project outputs defined, measurable and verifiable?
- **PPP contract type:** Will bundling construction and operations and/or maintenance in a single contract deliver a better outcome for the government compared with other procurement types?
- **Opportunities for risk transfer:** Are there opportunities for appropriate risk transfer to the private party, including design and construction risk, operations and maintenance risk, market risk and demand risk, financial risk, and environmental and social risk?
- **Market Capability and Appetite:** Will there be sufficient private sector appetite for this project to enhance market competition? Have similar PPP projects been successfully implemented in the past either in the country or other jurisdictions?

In addition to PPP suitability, affordability is another key factor for consideration in the screening process. This entails the following considerations:

- **Financing and funding:** Will the project be able to generate sufficient revenues from end users to meet operating expenses? If not, the government should assess whether there is sufficient public funding support available to bridge any cash flow shortfalls.
- **Potential of innovative revenue and funding sources:** Is there a potential to reduce the need for funding from the government or from user charges through alternative or innovative sources of revenue? For instance, non-farebox revenue generated from commercial developments in and around a metro rail corridor can supplement traditional farebox revenue streams.

This initial screening process will give rise to one of the following findings:

- **The project has the potential to be procured as a PPP;** hence, it should move on to the next stage of assessment; or
- **The project is not suitable for procurement as a PPP;** accordingly, the project should proceed for traditional procurement; or
- **The suitability of the project as a PPP is unknown as the project is missing key information;** hence, there is a need to further clarify some of the identified uncertainties before reaching a conclusion on the best procurement option for the project.

3.4. Enhancing Project Readiness

Once the project has passed through the PPP screening process and has been identified as a potential PPP project, a project management and governance plan should be developed.

After these are developed, the project can then be incorporated as part of the PPP pipeline.

3.4.1. Project Management Planning and Governance

Robust project management planning and governance typically include the following key components:

- ✓ Defining a detailed work program for the next stage (Project Appraisal Stage), along with a preliminary work program for the PPP Structuring Stage and PPP Procurement Stage;
- ✓ Including a stakeholder analysis and communications plan for internal and external audiences, including the end users and public; and
- ✓ Identifying the skills and capabilities needed to implement the project as a PPP and developing a staffing plan to establish a strong project management team.

Defining a detailed work program for the next stage (Project Appraisal Stage) along with a preliminary plan covering the PPP Structuring Stage and PPP Procurement Stage

A comprehensive work plan for the Project Appraisal Stage should outline the specific tasks, deliverables, and deadlines for each task, as well as the approvals needed at various stages. It should also clearly specify all permits, environmental approvals, and other prerequisites such as land availability, along with relevant aspects to be examined during the legal due diligence process.

Within the work plan, the Implementing Agency/ Contracting Authority should define all the key activities throughout the PPP process life cycle, including the PPP Procurement Stage. These activities include appointing advisors, conducting risk analyses and VFM assessments, performing legal, environmental, and social due diligence, conducting market testing, drafting the RFQ, RFP and the PPP Contract, obtaining approvals and authorizations, initiating the procurement process, managing qualification and classification, evaluating and awarding the contract, and executing the contract.

Including a stakeholder analysis and communication plan for internal and external audiences, including the end users and public

Stakeholder management and communications are important factors for the successful delivery of a project through a PPP. The government should clearly identify the critical stakeholder groups early in the project process with a view to (i) facilitating an informed understanding of the project, (ii) receiving critical feedback from the public, (iii) securing social, business, and political support, (iv) attracting potential investors, and (v) reducing risks.

The internal audience consists of officers and employees within the public sector who are directly or indirectly involved in the project and have a role in monitoring or interacting with the project. This includes entities such as the PPP Unit, relevant Ministries, the Implementing Agency/ Contracting Authority, other government departments associated with the PPP project, government legal staff, and external advisors engaged by the government entity.

The external audience consists of stakeholders outside of the government entity interested in and/or impacted by the project e.g., potential investors (including banks, investment funds, and development partners etc.), service users, Non-Governmental Organizations (NGOs), and other project affected groups.

The key aspects of the project to be communicated should include service needs to be satisfied and expected measurable outputs to be achieved, as well as the potential environmental (including land acquisition and resettlement) and social-economic impacts on the stakeholders.

Identifying capabilities needed and formulate a staffing plan to create a strong project management team

The Implementing Agency/ Contracting Authority should review the skills and capabilities needed to successfully implement the project as a PPP. These skills and capabilities can typically be divided into technical, environmental, social, economic, financial, and legal capabilities. The Implementing Agency/ Contracting Authority should assess whether it has sufficient internal capacity and capabilities, including a project leader, to perform the necessary studies and appraisals. If not, the Implementing Agency/ Contracting Authority should consider hiring external advisors to support the development of the necessary studies.

Engaging transaction advisors

If internal capabilities are assessed to be insufficient, then the Implementing Agency/ Contracting Authority should consider hiring external transaction advisors. The transaction advisors provide expertise in policy, legal, financial, social, environmental, accounting, tax and related technical fields. The transaction advisors can support the Implementing Agency/ Contracting Authority throughout the various stages of the PPP lifecycle (from project appraisal through to financial close). The transaction advisors will also play a key role in supporting the PPP procurement team in designing and implementing a competitive tender process at the PPP Procurement Stage.



4. Project Appraisal Stage

4.1. Overview of the Project Appraisal Stage

Box 4.1 Overview of the Project Appraisal Stage

This section covers the following topics for the Project Appraisal Stage of projects to be developed as PPPs:

- Project Feasibility (technical feasibility, legal feasibility, economic feasibility, environment and social feasibility, and commercial and financial feasibility (including 'bankability'))
 - Value for Money (VFM) assessment
 - Fiscal Affordability
-

The appraisal process for a PPP project usually begins when the project has been identified and screened as a potential PPP project and defined in terms of the project scope.

It is important to undertake a robust appraisal process to ensure that developing and implementing the identified project as a PPP provides an optimal outcome for the government. As highlighted earlier, in cases where an Implementing Agency/ Contracting Authority does not have the capacity to develop the appraisal studies, external transaction advisors should be hired to support the appraisal, structuring and procurement of the PPP transaction.

Project Feasibility

The purpose of the Project Feasibility Study is to investigate whether the project is economically and financially viable as a PPP. The Project Feasibility Study assesses and describes, inter alia, the technical, legal, economic, environmental and social, commercial and financial risk characteristics of the project and develops a project implementation plan.

Value for Money (VFM) Assessment

The VFM assessment determines whether the implementation of the proposed project as a PPP offers the government a superior value for money outcome compared to alternative procurement options, such as traditional public procurement. A PPP procurement is said to achieve a VFM outcome if the risk-adjusted costs associated with the PPP arrangement are lower than the risk-adjusted costs of the project under traditional procurement.

Fiscal Affordability

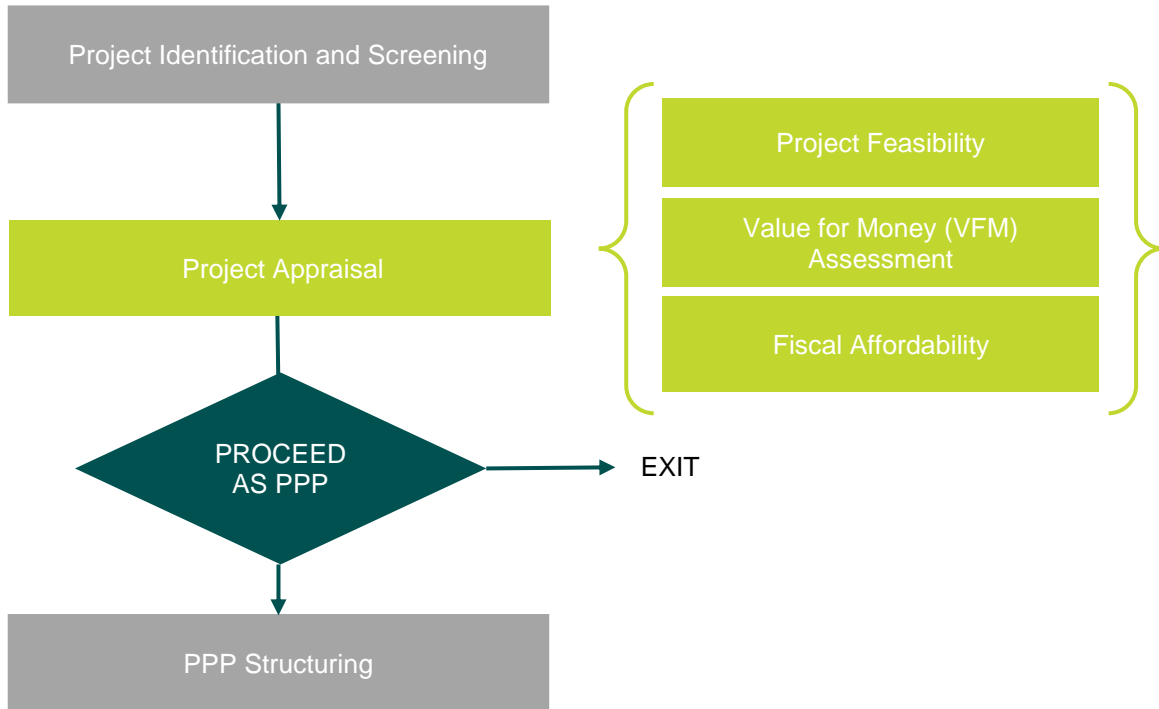
It is important for governments to assess the fiscal affordability of a project when appraising a project's PPP potential. PPP related fiscal commitments can be either direct (i.e. payments that the government is contractually committed to make under the PPP contract) or contingent (i.e. payments that are 'contingent' on an event that may or may not happen at some point in the future).

For any proposed PPP project, there are typically three basic questions that governments need to consider when deciding whether to pursue a project as a PPP:

- Is the project feasible?
 - Answer: Need to assess the technical and economic viability of the project.
 - Does the project provide VFM if procured as a PPP?
 - Answer: Need to evaluate the overall cost-effectiveness and efficiency of the PPP approach compared to alternative procurement methods.
-

- Is the PPP project affordable?
 - Answer: Need to analyze the financial implications and affordability of the project from the government's and/or end user's perspective.

Figure 4.1 Overview of the Project Appraisal Process



4.2. Project Feasibility

A Project Feasibility Study is typically conducted across the following six aspects of a project:

- Technical feasibility
- Legal feasibility
- Economic feasibility
- Environmental feasibility
- Social feasibility
- Commercial and financial feasibility (including project bankability)

4.2.1. Technical Feasibility

A technical feasibility study is undertaken to assess if the project can be implemented as planned, using proven technologies. In this assessment, a technical description of the engineering and non-engineering aspects of the project is developed based on the service requirements. In addition, the technical feasibility also highlights whether there are any specific technical risks of the project that should be considered if it is to proceed as a PPP.

Figure 4.2 Key Parameters for Technical Feasibility



While undertaking the technical feasibility study, specific criteria, appropriate for the type of infrastructure and the corresponding services under consideration, are used. These criteria address, inter alia, the following issues:

- Does the infrastructure design meet the need specified during the Project Identification and Screening Stage?
- Are the engineering design requirements of the project achievable? If so, are they achievable at a price comparable with other similar infrastructure?
- Is the proposed technology solution proven or, if it is new technology, can the associated risks be properly managed or allocated?
- Are there any existing site conditions that may adversely impact the project in terms of costs and construction delays?
- Can the scope of service be provided by the private sector from a legal and regulatory perspective?
- Can the service be specified in terms of outputs? If so, can the service be measured adequately through key performance indicators?
- What is the forecast demand for the project's services over the life of the project?
- What is the willingness to pay for the project's services by the users of the project?
- What are the capital costs of the project and the whole-of-life operation and maintenance costs?

- Can the main technological changes impacting service delivery over the life of the project be satisfactorily estimated and managed within the contract?

The overall objective of the technical feasibility study is to define a solution to meet the need, projected demand, standards, and other requirements and to determine the overall cost of the project, including capital, operating and maintenance and lifecycle costs.

4.2.2. Legal Feasibility

The objectives of the legal feasibility study include the following:

- To ensure that the Implementing Agency/ Contracting Authority has the requisite authority to procure the project.
- To ensure that the project can be implemented under the proposed PPP arrangement.
- To identify the legal risks and obstacles that need to be addressed under the project scope.

The legal due diligence should at least cover the following aspects:

Analysis of the applicable legal framework

- This involves identifying and analyzing the relevant laws and regulations that may impact the project. The legal and regulatory aspects that require review include the PPP legislation, public procurement law, laws governing private investment in public service delivery and foreign investment, property and labor regulations, land use planning laws, environmental and social regulations, and sector-specific legislation.

Assessment of the legal readiness of the Implementing Agency/ Contracting Authority

- The legal due diligence exercise should identify the necessary approvals and permits that the Implementing Agency/ Contracting Authority needs to obtain for the project to be procured as a PPP. The due diligence process should identify which party should be responsible for obtaining such approvals and permits.

In-depth legal analysis of the main project issues and risks

- Particular attention should be given to the legal implications of project related issues including financial issues, commercial viability, land and property assets issues, employment issues, and tax and accounting issues etc.

The main output of the legal feasibility analysis is a legal opinion as to whether the project can be implemented as a PPP and what needs to be done from a legal perspective to successfully implement the project. The legal opinion will, inter alia, advise on:

- Any legal obstacles and risks for the future development of the project as a PPP; and
- The development of an action plan to address the obstacles and manage the risks (prevention and/or mitigation) identified, together with an estimation of the time and resources necessary to do it.

4.2.3. Economic Feasibility

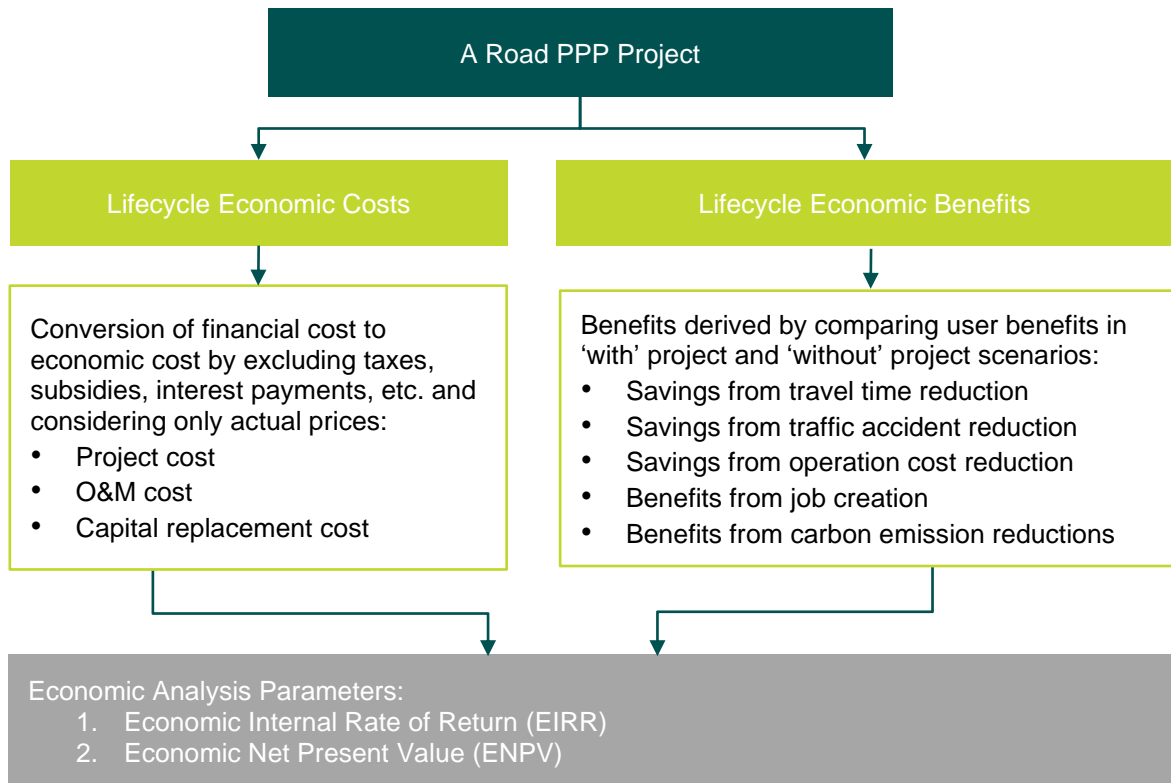
An initial Cost Benefit Analysis (CBA) should have been conducted at the Project Identification and Screening Stage. However, as this is at the early stage of the project development process, there is likely to be limited information and, as such, this initial CBA will have relied on limited and preliminary data. However, as the Project Appraisal Stage matures, more detailed data and information will become available that can be used for a more precise economic evaluation of the project. Therefore, the initial CBA should be updated to include this more detailed data and information.

The CBA assesses if a PPP project is economically viable by identifying and quantifying all the costs and benefits of the project attributable to society. The project is regarded as being economically viable if the socio-economic benefits outweigh the socio-economic costs.

During the Project Appraisal Stage, the CBA should at least reflect the following:

- A more detailed description of the project scope in terms of infrastructure design and services, as this can help to refine the identification of the service users and other stakeholders whose socio-economic costs and benefits should be considered.
- The “willingness to pay” evaluations undertaken as part of the estimation of demand, as this will allow a more accurate projection of economic benefits.
- The technical specifications that will provide a much more precise estimate of the whole-life costs of the project; and
- The risk assessments that can help provide risk related adjustments to the underlying economic data being used.

Figure 4.3 Overview of an Economic Feasibility Study



4.2.4. Environmental Feasibility

The main purpose of an assessment of the environmental issues at the Project Appraisal Stage is to ensure that environmental considerations (including climate change) are explicitly addressed and incorporated as part of a project “go” or “no-go” decision.

To conduct an effective assessment of the environmental aspects of a project, four steps are necessary as follows:

Identification of all legal and regulatory aspects relevant for obtaining the environmental approvals

- Each country will impose its own environmental regulations and determine standards to be met by infrastructure projects, as well as define the processes for obtaining approvals. The project team needs to produce a thorough and detailed evaluation of those regulations, specifically covering the different stages and types of environmental approvals needed, required level of detail, content for assessment, sector-specific requirements, and estimated time for processing the approvals based on the size and sector of the project. As a good practice, an environmental requirements log based on the above evaluation criteria can provide a useful guide for the project's environmental due diligence.
- In many cases, projects may require financing from international financial institutions like the World Bank and Asian Development Bank, as well as other development partners. In such cases, it is important to note that the project's environmental aspects must also be assessed against international environmental performance standards and not solely local standards.

Identification, description and, as far as possible, quantification of the environmental impacts of the project³

- The EIA report should address the project's environmental impacts and typically includes: (i) a full description of the area that will be impacted, (ii) an analysis of potential environmental impacts (including impacts on flora and fauna) on this area, (iii) an identification of the consequences of the construction of the project in term of its main inputs, and (iv) a full description of the physical and biological aspects of the area after construction and during operation of the infrastructure.

Strategy to mitigate the identified environmental impacts

- A mitigation strategy provides measures to avoid and minimize adverse environmental impacts caused by the project. The mitigation measures could include an alternative technical design with significant contribution to cost savings and possible unique solutions which take advantage of the PPP mode. Where residual unintended risks or impacts remain, a compensation plan for environmental impacts should be put in place.

Obtain the environmental permits and final approvals needed for construction of the project

- Due to the considerable expense associated with conducting comprehensive environmental impact studies and the typically limited availability of information during the early stages of project development, it is often impractical to obtain all the necessary environmental approvals during the Project Appraisal Stage. However, it is considered best practice to secure as many of the environmental permits as possible, even if they are provisional, prior to the project launch. In addition, this environmental assessment should provide an initial estimate of the potential costs involved in environmental licensing and compensation measures, as well as the timeframe required for obtaining complete environmental approvals, licenses, and permits.
- The objective of the environmental feasibility analysis is to provide an assessment of the environmental impacts and viability of the project. This exercise also supports the identification of design alternatives to reduce the environmental impact of the project, as well as identify opportunities for climate mitigation and adaptation.

4.2.5. Social Impact Assessment

The Social Impact Assessment (SIA) identifies and analyses any potential adverse impacts of the project on communities and stakeholders affected by the infrastructure project, including the workers that will be employed to construct and operate the project.

³ This exercise is often referred to as an Environmental Impact Assessment (EIA)

The SIA provides recommendations as to how these impacts can be mitigated and the results of the SIA should be fully considered before a decision is made to proceed with the project.

A minimum set of social issues to be addressed by the SIA (with a particular focus on gender impacts) includes loss of land and livelihoods, loss of access to natural resources, grievance redress mechanisms, damage to cultural sites and workers' rights and compensation and the corresponding impact on women, men, girls and boys, etc.

The Social Impact Assessment (SIA) typically involves the following steps:

- Comprehensive identification of the groups and individuals residing and/or working within the project's area of influence, including the mapping of communities and their social, economic, and cultural ties to the project site;
- Establishment of a social baseline that assesses the existing conditions and factors to be considered prior to project implementation;
- Evaluation of the project's impacts on the communities identified within the area of influence. This entails projecting the baseline conditions into the future, both with and without the PPP project, and comparing the identified impacts; and
- Identification of mitigation strategies to address any adverse impacts identified to enable the development of a social action plan, which should recommend the appropriate strategies along with a preliminary estimation of implementation costs and timeline.

The SIA should identify the impacts of the project on the community and classify them in terms of their significance. It also provides recommendations for actions that can avoid, minimize, or compensate for the adverse social impacts of the project, as well as establishing a robust grievance redress mechanism.

Similar to the EIA, full completion of the SIA during the Project Appraisal Stage may not be possible, particularly for large-scale projects. However, it is crucial to make substantial progress on the SIA to support an informed decision on whether to proceed with the project. This includes gaining a reasonably clear understanding of the social impacts and the associated costs of potential mitigation strategies.

4.2.6. Commercial and Financial Feasibility

In determining the commercial and financial feasibility of a project, the analysis is conducted from the perspective of the private parties under a PPP arrangement. A project is feasible when the expected revenues (inflows) to the private party are sufficient to cover all expected costs (outflows) which include operation and maintenance costs, financial costs (repayment of debt and interest), taxes, and payback of the investment with a reasonable return (dividends).

The purpose of the commercial and financial feasibility exercise will differ depending on the payment mechanism used.

- **Users-pay PPPs:** Where the revenues to be generated for the project are paid by users (for instance, tolls paid under a toll road project), the analysis is focused on evaluating the project's capability to raise finance, the sufficiency of the cash flow generated from the project to service the debt raised to fund the capital expenditure needs and the operating costs, and the ability of the private sector to earn a reasonable return on its investment.
- **Government-pays PPP:** Where the project is not financially viable and is reliant on government support through availability payments or subsidies, the analysis focuses on the level of financial support that the government needs to provide to make the project financially feasible to the private party and whether the government has the funding to cover these payments over the life of the PPP Contract.

The commercial and financial feasibility should be assessed from two different perspectives: lenders (the debt providers) and investors (the equity providers).

Lenders primarily focus on assessing the project company's ability to repay debt based on the cashflows generated by the project. To evaluate this capacity, lenders establish specific criteria to determine the project's 'bankability.' These criteria typically include factors like revenue stability and the ratio between project-generated cash resources and the total amount needed to service debt. Financial institutions commonly utilize ratios such as the Debt Service Coverage Ratio (DSCR), Loan Life Coverage Ratio (LLCR), and Project Life Coverage Ratio (PLCR), as standard measures in this assessment.

For the investor, a project must be both bankable and provide an acceptable return to the investor given the risk of the investment. The two most common techniques used to assess the commercial and financial feasibility from the investors' perspective, are the calculation of the Net Present Value, based on the project's discounted net cash flows, and the Internal Rate of Return of the equity cash flow.

- The Net Present Value (NPV) is the sum of the investor's future net cash flows discounted by an appropriate rate of return. If the NPV calculated using the discount rate (return on capital required by the investor) is positive, the project is deemed viable from the investor's perspective.
- The Internal Rate of Return (IRR) is the discount rate that makes the NPV of any given cash flow equal zero. Therefore, if the equity IRR of the equity cash flow is higher than the required rate of return of the investors (also called a hurdle rate), a project is said to be commercially attractive.

The assessment of the commercial and financial feasibility of a project will focus on examining the capacity of the project to generate sufficient cash flows to meet its costs.

There are three potential outcomes from this assessment:

- The first is that the project revenue is expected to be sufficient to meet the financial and commercial feasibility criteria discussed in the previous subsection, in which case the project is considered financially feasible.
- Second, it is possible that the project is expected to be able to generate cash flows much higher than those required for the project to be commercially and financially feasible. In this case, the government might consider requiring payments be made by the private party to the Implementing Agency/ Contracting Authority in return for the government entering into a PPP contract e.g., through a revenue sharing arrangement or a concession fee.
- Lastly, the expected revenue may not be sufficient to confirm that the project is financially feasible. If so, there are a several options that the government can consider to improve the project's financial feasibility, including:
 - Revising or reducing the project scope to reduce costs;
 - Adjusting the technical requirements to reduce costs; or
 - Providing government support e.g., through Viability Gap Funding (VGF).

The financial and commercial feasibility analysis provides (i) an assessment of the attractiveness of the project to investors and lenders, (ii) an estimate of any government support required to fill the funding gap, as well as (iii) relevant data for the financial modeling and structuring of the project.

Project Bankability

The bankability of a project can be defined as the degree of willingness of potential lenders to provide debt finance to the project. The extent of debt (i.e. the level of gearing) is contingent on the projected annual cash flow that is available for debt service. If potential lenders perceive that the project bears an unacceptable degree of risk and uncertainty, they will most likely refrain from providing financial support, thereby rendering the project non-bankable.

Given that PPPs often require debt and involve high leverage, project stakeholders, including investors and the public sector, need to address the issue of bankability from the project's inception. Evaluating the bankability of a project requires a comprehensive assessment that considers financial, economic, and technical aspects, as well as an appropriate risk allocation framework tailored to the project's nature, associated risks, and lenders' interests. This assessment helps to ensure an acceptable level of credit risk.

Quantitative loan analysis (including the use of cashflow models and sensitivity analysis) plays a crucial role in determining bankability. Lenders will assess the project company's ability to meet principal and interest payments and consider the exposure to default within acceptable limits.

In addition to undertaking a quantitative analysis, lenders will also consider several qualitative criteria when assessing a project's bankability. These criteria include the creditworthiness of the public sector counterparty, the stability and effectiveness of the legal framework for PPPs, the enforceability of the PPP contract and related agreements, confidence in the regulatory regime, the right to intervene in case of project failure, availability of alternative contractors, and the effectiveness of insurance coverage, among others.

In some infrastructure projects, climate-related risks may also impact the project's bankability, given that they may impact the project's technical and commercial aspects. Therefore, the early identification of such risks and strategies to address them can help improve the overall bankability of the project.

4.3. Value for Money (VFM) Assessment

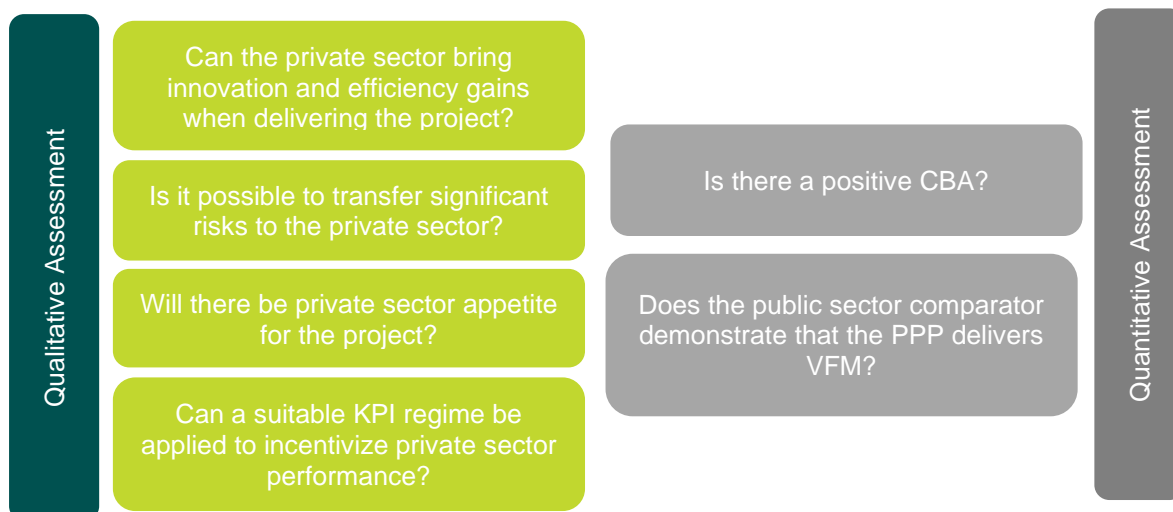
A Value for Money assessment indicates whether a project can be more efficiently implemented under a PPP scheme compared to traditional public procurement.

The procurement of a project through a PPP generates Value for Money if it delivers higher net economic benefits to society, taking into consideration the whole-life costs of the project, compared with a public sector procurement option.

4.3.1. VFM Methodology

The VFM assessment can be conducted using a quantitative approach, a qualitative approach or a combination of both. Some frameworks focus on a quantitative analysis, requiring a comparison of the cost of the PPP against the cost of traditional delivery, which is represented by a Public Sector Comparator (PSC) cost model. Other frameworks rely more on a qualitative analysis or on a combination of the two approaches.

Figure 4.4 Quantitative and Qualitative VFM Assessment



The common approaches to quantitative and qualitative VFM assessment are described below:

Quantitative Method

Step 1: Development of a Public Sector Comparator (PSC)

- Estimate cash flows with whole-of-life costs, considering revenues generated from the project and received by the government (if any). These costs and revenues should be based on the government entity delivering the project to the same output specifications and performance standards as expected of the private party under the PPP Contract.
- Identify the risks that the government typically retains under traditional procurement, but that would be transferred to the private party under a PPP model.
- Develop the risk-adjusted cashflows by adjusting costs or revenues; this may include adjustments related to cost overruns, and project delays, etc.
- Further adjust for competitive neutrality, for instance, adjustments related to taxation.

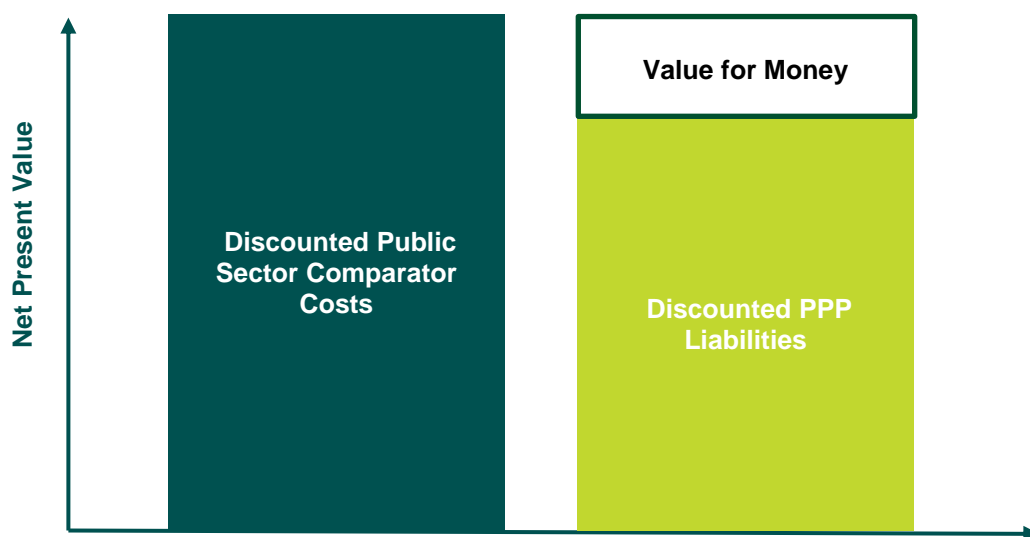
Step 2: Development of a PPP Cash-flow Model

- Develop PPP cashflows based on expected capital expenditure (CAPEX), operating costs, and revenues. Adjust the cashflows for potential efficiencies of the private party.
- Adjust the cashflows for transaction costs, financing costs, and contract management costs.
- Identify the level of revenues from either a government-pays regime (availability-based payments) and/or users-fee based payments.

Step 3: Comparison of the NPV

- Achieve a comparable value (Net Present Value) from two cost structures with different time profiles by applying appropriate discount rates for the PSC and PPP cash flows.
- The option with the lower NPV is considered to offer better VFM. For instance, a PPP offers better VFM if the NPV of the PSC is higher than the NPV of the PPP option, as indicated in the figure below.

Figure 4.5 Simplified Value for Money Example



Source: APMG International

Qualitative Method

The non-financial benefits of PPPs should also be considered and presented in a qualitative analysis. Additionally, any problems associated with private sector participation with respect to delivering and operating the infrastructure asset should also be highlighted in the qualitative assessment, followed by the proposed strategy to mitigate them.

The table below provides a methodological framework for conducting a qualitative VFM assessment. It contains a structured list of questions aimed at helping to assess the presence of VFM drivers in a project.

Table 4.1 Qualitative VFM Assessment Tool

VFM Drivers	Assessment Questions
Output-based contracting	<p>Is there some degree of flexibility in the technical solution/ service and/or the scope of the project?</p> <p>Is there scope for innovation in either the design of the assets or in the provision of the services?</p>
Optimal risk allocation	<p>Is there scope for significant risk transfer to the private party (in accordance with the principle of optimal risk allocation)?</p>
Private outsourcing	<p>Does the private party have significant cost advantages in comparison with the Implementing Agency/ Contracting Authority in the delivery of the project services arising from greater efficiency, economies of scale, greater experience/expertise, etc.?</p> <p>Could the private party achieve a better commercial utilization of the assets underpinning the project, resulting in higher revenues?</p>
Life-cycle optimization	<p>Does the project offer the potential to achieve efficiency gains from life-cycle optimization?</p>

VFM Drivers	Assessment Questions
	<p>Is it possible to integrate the design, build and operation elements of the project?</p> <p>Are there significant operating costs and maintenance requirements?</p>
Performance-based payments	<p>Would incentives for service delivery be enhanced through a performance-based payment mechanism?</p>
Private financing	<p>Will the private sector be interested in financing the project?</p> <p>Is it the case that no or insufficient public funds are available, so that the project cannot be undertaken unless private financing steps in?</p>
Operational flexibility of the Implementing Agency/ Contracting Authority	<p>Is it possible to reconcile the degree of operational flexibility desired by the Implementing Agency/ Contracting Authority and the long-term nature of a PPP arrangement?</p> <p>Will the PPP arrangement leave the Implementing Agency/ Contracting Authority with sufficient operational flexibility to respond to future needs?</p> <p>What is the likelihood of large changes in service needs during the life of the PPP contract and can this be dealt with under the contract?</p> <p>If the services performed under the PPP arrangement interfere with other services or other projects not covered by the PPP contract, are these interfaces manageable?</p> <p>If the PPP arrangement necessitates the transfer of government staff to the private party, will it be possible to accomplish this transfer without major problems or resistance?</p>
Implementing Agency/ Contracting Authority's capacity	<p>Does the Implementing Agency/ Contracting Authority have access to sufficient human and financial resources to prepare, tender and manage the PPP project post award?</p>
Policy and regulatory barriers	<p>Are there any legal or regulatory obstacles to delegating service provision to a private party?</p> <p>Is the provision of the services under a PPP arrangement compatible with the safeguarding of public interests (for instance with respect to environmental sustainability, workers' safety, and fair competition, etc.)?</p> <p>Is the provision of the services under a PPP arrangement compatible with other policy goals (for instance with respect to land use, income distribution, and economic development, etc.)?</p>
Large and uncontrollable risks	<p>Does the project involve significant risks that are beyond the control of the private party that could make private finance unfeasible or costly e.g., traffic risk (especially for greenfield projects), uncertain macroeconomic conditions, uncertain costs of meeting environmental regulations, use of unproven technology, and challenging terrain conditions?</p>
Private party's capacity and interest	<p>Is the private party technically and financially capable of implementing the project?</p>

VFM Drivers	Assessment Questions
	Has the private sector successfully delivered similar projects? Will there be sufficient interest from potential bidders to ensure effective competition during the tender stage?
Overall assessment	Based on the answers to the questions above, is the proposed PPP arrangement likely to generate VFM?

4.4. Fiscal Affordability Assessment

A government's fiscal commitments under a PPP Contract will generate long-term fiscal consequences for the government. These can be in the form of direct liabilities (when the project is partially or fully funded by the government) or contingent liabilities (when risks are allocated to the government either explicitly in the contract, in the debt agreements, or by the legal framework).

A project is said to be fiscally affordable from the government's perspective, if the government's financial obligations under the project (e.g., availability payments) can be accommodated within the government's current and future budget envelopes.

To assess fiscal affordability, the initial step is to identify the government's liabilities over the contract term. Fiscal liabilities can be either direct or contingent:

- Direct fiscal commitments may include up-front capital contributions or regular payments made by the government to the private sector investor e.g., availability payments or shadow tolls.
- Contingent payments are ones that will only be made if certain events occur e.g., payments that may have to be made under a minimum traffic guarantee if traffic levels are below projections on a PPP highway, or compensation in the event of early termination.

After identifying the liabilities, the next step is to assess the ability to accommodate the project related liabilities within the government's long-term budget. This can be done by comparing the fiscal liabilities of the project to the government's projected budget appropriations or compliance with overall budgetary limits and constraints.

The government will also need to ensure that the government's budget process allows for future fiscal commitments under the PPP Contract to be met over the life of the PPP Contract.

5. PPP Structuring Stage

5.1. Overview of the PPP Structuring Stage

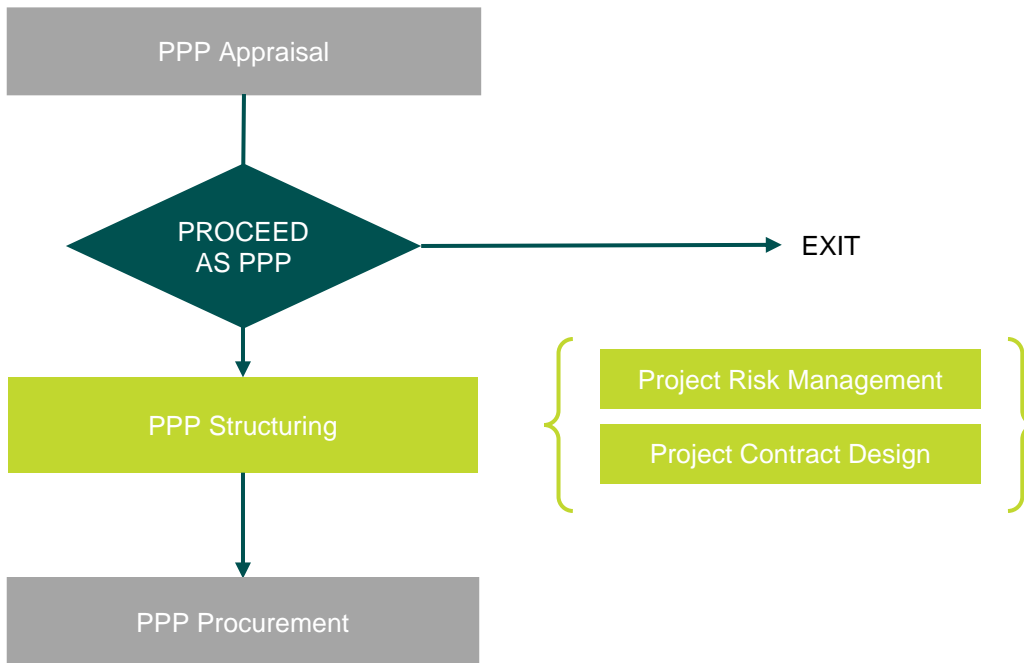
Box 5.1 Overview of the PPP Structuring Stage

This section introduces the principles of the PPP Structuring Stage, including risk management and contract design, and covers:

- The concept of project risk management, including risk identification, prioritization, mitigation, allocation, and structuring.
- Incorporation of the risk allocation and commercial principles into the PPP contract, and the development of other fundamental provisions of the contract.

Structuring a PPP project requires the allocation of responsibilities, rights, and risks between the public and private parties. This allocation will be documented in the PPP contract. The PPP Structuring Stage typically includes two key tasks, namely project risk management and project contract design, as shown in the figure below.

Figure 5.1 Overview of PPP Structuring Stage



5.2. Project Risk Management

5.2.1. Risk Management Cycle

The risks involved in a PPP project are normally assessed by determining (i) the likelihood or probability of a risk event taking place; and (ii) the financial impact of the risk event if it does occur:

To manage PPP project related risks, the PPP Structuring process should consider the following key elements in the risk management cycle:

- **Risk Identification:** Identify and describe all the risks that could possibly impact the PPP project.
- **Risk Prioritization:** Prioritize those risks that have a high degree of expected loss defined as a combination of likelihood and impact.
- **Risk Mitigation:** Identify options to mitigate the risks identified.
- **Risk Allocation:** Allocate risks between the Implementing Agency/ Contracting Authority and private party to maximize Value for Money (VFM).
- **Risk Structuring:** Structure risk-related provisions to implement risk allocation and mitigation into the contract.

5.2.1.1. Risk Identification

The risk management process starts with the identification of project risks. The objective of risk identification is to obtain a comprehensive understanding of all the risks that can potentially adversely affect the project. The broad categories of project risks are as follows:

- Site risks
- Design risks
- E&S risks
- Duplication⁴ risks
- Construction risks
- Commissioning risks
- Technology risks
- Revenue risks
- Maintenance risks
- Operating risks
- Foreign currency exchange risks
- Interest rate risks
- Changes in law risks
- Force majeure risks
- Early termination risks
- Political Risks

A risk matrix should be developed to identify relevant project risks. The risk matrix identifies and systematically describes all risks, including risk effects/ consequences and the potential mitigation measures. The risk matrix documents the preferred risk allocation determined by the Implementing Agency/ Contracting Authority, so that the risk allocation can be reflected in the draft PPP Contract.

The risk matrix should include the following key components for each risk.

- Nature of the risk and category
- Description of the risk
- Risk effects and consequences (including financial impacts)

⁴ Duplication risk is the risk that an existing project or new project built after the PPP project provides similar services to the services being provided by the PPP project e.g., a new road is built near the PPP road causing some traffic to shift from the PPP road to the new road, thereby undermining the commercial viability of the PPP road.

- Measures to mitigate the risk, where available
- Preferred risk allocation between the Implementing Agency/ Contracting Authority and the private party

5.2.1.2. Risk Prioritization

The objective of the second component of the risk management process is to prioritize the risks identified, which helps to distinguish between significant and less significant risks via a detailed risk assessment. This can be done through a qualitative and/or quantitative risk assessment.

Qualitative Risk Assessment

A qualitative risk assessment is a commonly used approach for prioritizing risks. A qualitative risk assessment will determine two factors of risk:

- Likelihood or probability of the risk occurring; and
- Cost consequences of the risk eventuating.

These two factors are assigned either nominal (e.g., 1, 2, 3) or descriptive (e.g., high, medium, low) qualitative scales. These adjustments are then entered into a risk impact matrix to determine the risk rating.

Figure 5.2 Example of a Qualitative Risk Impact Matrix

Name of Risk: Description of Risk:			Cost Consequence				
			Very high	High	Medium	Low	Very low
			5	4	3	2	1
Likelihood	Very high	5	Very high	Very High	High	Medium	Low
	High	4	Very High	High	Medium	Medium	Low
	Medium	3	High	Medium	Medium	Low	Low
	Low	2	Medium	Medium	Low	Low	Low
	Very low	1	Low	Low	Low	Low	Very low

The focus of the qualitative risk allocation exercise is to define the optimum risk allocation by focusing on the allocation of high and very high risks, as these are considered the more significant risks associated with the project.

Quantitative Risk Assessment

A quantitative risk assessment is usually undertaken during the financial analysis and VFM stages to estimate or define monetary values of the possible outcomes of these assessments taking risk factors into consideration. This is also referred as “adjusting values to risk”.

For achieving optimum risk allocation, quantitative analysis may also be used when there are significant risks for which the qualitative assessment is unclear or of limited value.

There are several tools and techniques that can be used in quantitative risk analysis. Those tools and techniques include:

- **Decision Tree Analysis:** A diagram that shows the implications of choosing various alternatives.
- **Monte Carlo Analysis:** A technique that uses optimistic, most likely, and pessimistic estimates to determine the probability and cost impact of risks.
- **Sensitivity Analysis:** A technique used to determine the risk that has the greatest impact on a project.

5.2.1.3. Risk Mitigation

The objective of the third component of the risk management process is to identify preliminary mitigation methods for risks identified by the Implementing Agency/ Contracting Authority. Some of the risks identified can potentially be partially or fully mitigated through appropriate actions by the Implementing Agency/ Contracting Authority during the Project Identification and Screening Stage and Project Appraisal Stage.

The process should also enable the Implementing Agency/ Contracting Authority to determine which risks are best retained by the government.

General risk mitigation measures may include:

- Optimizing the scope of the project to ensure that the project is deliverable and can meet the output requirements;
- Robust planning and project preparation; and
- Ensuring realistic delivery timelines.

Other methods of risk mitigation include conducting comprehensive studies to enhance the understanding and evaluation of project risks. In this context, it is important for the Implementing Agency/ Contracting Authority to conduct thorough risk assessments prior to project procurement, regardless of whether the risk will be retained or transferred to the private party. This assessment should be carried out during the Project Appraisal Stage, ensuring that prospective bidders receive relevant and meaningful information with respect to project risks.

5.2.1.4. Risk Allocation

The risk allocation process identifies and defines which risks the Implementing Agency/ Contracting Authority should retain and which risks should be transferred to the private party.

Allocation of the identified risk should be determined by which party is better able to (i) control the likelihood of the risk occurring; (ii) manage the impact of the risk; and (iii) mitigate and/or manage the risk at the lowest cost.

The optimal allocation of risk is crucial in achieving a VFM outcome for a PPP project. It is important to note that even when risks are transferred to the private party, the government (through the Implementing Agency/ Contracting Authority) may still retain reputational exposure risk as the ultimate owner and responsible party for the asset and service. Therefore, diligent monitoring by the government is essential to ensure that the private party effectively manages the risks that have been transferred to it.

5.2.1.5. Risk Structuring

Risk structuring occurs once the risk allocation is defined. By structuring risks, the risk allocation is implemented and developed further into the contract through various clauses in the contract. This is done through the appropriate provisions by specifying:

- The definition of the risk events (detailing when a specific risk event has occurred).
- The extent and form to which each party assumes each of the risks.
- How the party that has not been allocated the risk is compensated if the risk occurs.
- Exceptions to events and adding qualifications to general obligations, such as, the need to complete construction and commissioning within a specified time frame.

5.2.2. Main Project Risks and their Potential Allocation

This subsection introduces a list of the most common risks and how these risks are typically allocated between the Implementing Agency/ Contracting Authority and private party and structured in contracts. However, it is important to note that the actual allocation of risks is very project specific and, as such, will vary from sector to sector and project to project.

Table 5.1 Examples of Main Project Risks and their Potential Allocation

Risk Name	Risk Allocation
Risks Related to the Design and Construction Phase, including Site Conditions	
Land availability and acquisition risks	The best practice for this risk is for the Implementing Agency/ Contracting Authority to retain this risk, as typically it is the Implementing Agency/ Contracting Authority that will specify the location of the development site for the project, can control processes such as compulsory land acquisition and compensation to facilitate the project should it be required and secure rights of way. However, sometimes this risk is allocated to the private party or shared.
Environmental risk	This risk is essentially a design risk and should generally be borne by the private party.
Permits and licensing risk	While the Implementing Agency/ Contracting Authority should try to anticipate and obtain permits where possible based on the outline plans for the works, it is common practice for the private party to be assigned responsibility for securing the necessary permits and approval (with the support of the Implementing Agency/ Contracting Authority)
Design risk	As the private party commonly develops the design in PPPs, the private party should bear the design risk. The private party usually assigns this risk to the Construction/ EPC Contractor.
Technical risk	The risk that the technology being used in the project is not suitable or unproven should be borne by the private sector, since it is the private sector that would typically propose the technical solution.
Construction risk	The risk that the actual project costs or construction time exceed the projected costs and time is generally borne by the private party - who will typically pass this risk through to the Construction/ EPC Contractors.
Completion and commissioning risk	The risk of failing to complete the project in accordance with the contract is generally borne by the private party.

Risk Name	Risk Allocation
Risks during the Operating Phase	
Revenue/ Demand risk: user-pays	The risk of the actual revenue flows not being in line with forecasts should be borne by the private party.
Revenue risk: availability payments	Revenue risk linked to availability and quality issues (e.g., when the performance requirements and performance target levels are not met) must be the responsibility of the private party.
Revenue risk: inflation and indexation	Generally, the risk of cost inflation that is not compensated for by revisions to pricing should be assumed by the private party.
Operating and maintenance (O&M) cost risk	This is a natural risk to be allocated to the private party, as the O&M obligation is a core element of any PPP contract scope.
Residual value and hand-back risk	The risk of not meeting the hand-back requirements specified in the contract should be borne by the private party.
Financial Risks	
Availability of finance risk	The risk of financing (especially third-party debt arrangements) not being available at commercial close or before construction starts, or only being available on prohibitive conditions should generally be assumed by the private party.
Financial costs/interest rate risk	The risk should generally be borne by the private party. The exception is the interest base rate risk between bid submission and financial close, which is sometimes taken back or shared by the Implementing Agency/ Contracting Authority in some countries.
Refinancing risk	Some jurisdictions include the obligation for the private party to share any refinancing gains with the Implementing Agency/ Contracting Authority. In some specific projects, the Implementing Agency/ Contracting Authority may also share the downside refinancing risk i.e., the situation where there is an increase in financing costs.
Other Risks	
Changes in law risk: specific and discriminatory changes in law	Any change in law (including changes in policies and regulations) that generally affects any business should be borne by the private party. Discriminatory changes in laws designed to specifically impact the Special Purpose Vehicle (SPV) should be borne by the Implementing Agency/ Contracting Authority via compensation to the private party.
Change in scope or services risk	Changes in service requirements or scope of works needed to adapt the project to new circumstances should include provision for fair compensation to the private party, under rules clearly established in the contract.

Risk Name	Risk Allocation
Force majeure risk	Political risks and natural disasters or other natural events with potential extraordinary impact, such as hurricanes, earthquakes, and storms etc., are events not controllable by either party and should be a shared risk. Especially considering that climate change is the new 'norm' and the severity of climate events is increasing, the natural events that can be reasonably predicted may be built in as climate change risks and should be shared between the public party and the private party.
Termination risk	If non-performance under a PPP contract causes the performing party to terminate the contract, then the non-performing party will be required to compensate the performing party.

Table 5.2 Summary of the Potential Allocation of Key Project Risks⁵

Risk Name	Private Party	Implementing Agency/ Contracting Authority	Shared
Land availability and acquisition risks		√	
Environmental risk	√		
Permits and licensing risk	√		
Design risk	√		
Technology risk	√		
Construction risk	√		
Completion and commissioning risk	√		
Revenue/Demand risk: user-pays	√		
Revenue risk: availability payments	√		
Revenue risk: inflation and indexation	√		
O&M cost risk	√		
Residual value and hand-back risk	√		
Availability of finance risk	√		
Financial costs/interest rate risk	√		
Refinancing risk	√		
Changes in law risk	√		
Change in scope or services risk		√	
Force majeure risk			√
Termination Risk (Contractor Default)	√		
Termination Risk (Public Sector Default)		√	

5.3. Contract Design

The outcome of the risk allocation process should be reflected in the PPP Contract. In particular:

- **Performance requirements:** Define the required quality and quantity of assets and services expected to be provided, along with monitoring regimes, enforcement mechanisms, and penalties.

⁵The actual allocation of risks will be very sector and project specific.

- **Payment mechanisms:** Define how the private party will be paid, through user charges, government payments based on usage or availability, or a combination thereof, and how bonuses and penalties can be built in.
- **Adjustment mechanisms:** Build into the contract the mechanisms for handling changes, such as reviews of tariffs, or changing service requirements or change-in-law provisions.
- **Dispute resolution procedures:** Provide a framework for contractual disagreements, which include outlining the responsibilities of regulatory bodies and courts or utilizing specialized committees or global arbitration.
- **Termination provisions:** Clarify the duration of the contract, the conditions under which the transfer of ownership or control of the goods or services being contracted will occur, and the consequences and conditions of ending the contract before its intended completion date.

5.3.1. Performance Requirements

To guarantee that the private party providing services under a PPP Contract fulfills the required service standards, the contract should explicitly state the desired performance criteria and the penalties for not meeting the criteria. These criteria are commonly known as Key Performance Indicators (KPIs), which serve as the standard for evaluating the quality of services offered.

A key feature of PPPs is that performance by the private party is measured based on the required outputs, rather than the inputs required to achieve the outputs. Focusing on outputs rather than inputs, encourages innovation and efficiency from the SPV and allows for risks associated with inputs to be transferred to the private party.

5.3.2. Payment Mechanisms

The payment arrangement determines how the private party engaged in the PPP will be remunerated. The sources of revenue under a PPP can be broadly classified into two categories:

- User payments are made by the end-users of the project directly to the private party. For PPPs that involve charging users for services, the PPP contract will establish the right of the private party to collect these charges and include, as appropriate, mechanisms and responsibilities for setting and/or adjusting the level of charges over time.
- Availability payments are made by the government to the private party and are linked to the availability of the assets or services provided during the contract. While government paid availability payments are commonly used in social infrastructure projects, they can also be used to minimize the need for user charges in economic infrastructure projects. Key considerations when defining availability payments from the government include risk allocation implications, linkage to clear output specifications and performance standards and possible indexation of payment formulae subject to certain risk factors.

A PPP payment mechanism will be user fee based or availability payment based or a combination of both (i.e., a Hybrid Payment mechanism). Whichever payment mechanism is used, it is important that the basis, timing and mechanism for payment is explicitly outlined in the contract.

5.3.3. Adjustment Mechanisms

PPP contracts are typically long term and are often complicated and risky, which may make it challenging for PPP contracts to fully anticipate up front all future situations. Therefore, PPP contracts should contain provisions that will accommodate these potential changes.

Some broad structuring mechanisms for dealing with several different types of change are highlighted below:

- **Financial equilibrium clauses:** Financial equilibrium clauses in a PPP Contract allow for changes to the key financial terms of the contract as compensation for certain events that are outside of the control of the private party. These adjustments are determined based on a mutually agreed financial model that remains in effect for the duration of the contract. Three common reasons for unexpected changes that may require financial equilibrium revisions are force majeure, government action, and unforeseen changes in economic conditions.
- **Changes to service requirements:** The Implementing Agency/ Contracting Authority may find it challenging to accurately predict service requirements throughout the contract's duration. Therefore, contracts usually include methods for dealing with changes to service requirements in response to changing circumstances, which may include advancements in technology and increases in demand for a service above those initially forecast.
- **Changes to tariff or payment rules or formulae:** PPP Contracts usually specify tariffs or payments using formulas that allow for regular adjustments based on factors such as inflation. These contracts can also include methods for reviewing the formulae periodically or for making one-time adjustments in exceptional circumstances (with specified triggers).
- **Market testing and benchmarking operating costs:** Some PPP Contracts require periodic market testing or benchmarking of certain sub-services in the contract, to allow costs to be adjusted to market conditions prevailing at the time. This is usually the case when a PPP involves the provision of a long-lasting asset (like a school or hospital facility) alongside shorter-term soft services that are typically contracted in the market. Through periodic benchmarking exercises, it allows the price charged for the soft services to be kept in line with market conditions, which cannot be achieved via a fixed price (with simple inflation indexation) in the contract.
- **Refinancing:** As the project is implemented, changes in the risk profile or capital markets may allow the SPV to replace or renegotiate its initial debt under more favorable terms. In many PPP Contracts, guidelines are established for determining and sharing the gains (and losses) from refinancing.

5.3.4. Dispute Resolution Mechanisms

A PPP Contract should provide parties with details as to how disputes are to be resolved.

The main mechanisms used to resolve disputes are:

- **Expert determination:** The PPP Contract could designate a Dispute Resolution Board (comprising a panel of independent experts acting as arbitrators) in case of dispute.
- **Mediation:** To resolve a dispute, a neutral third party (such as an independent expert) can be appointed to assist the parties to come to an agreement without resorting to formal arbitration. This option is often pursued in the initial stages of a dispute.
- **Arbitration:** Arbitration serves as a middle ground between the court-based approach of litigation and mediation for resolving disputes.
- **Decision by the relevant regulatory body:** In the case of PPPs in sectors that fall under the jurisdiction of an independent regulatory body, the regulator can be given the task of resolving specific disputes.
- **Litigation:** PPP contractual disputes can also be resolved through the jurisdiction of the courts. This is typically seen as a last resort option, given the costs and reputational damage arising from taking a dispute to court.

5.3.5. Termination Provisions

PPP Contracts can be terminated early for various reasons. Below are the typical reasons for early termination, together with a summary of the methods for calculating compensation under each of the termination scenarios:

- **Termination for convenience (or "unilateral termination"):** In the case of public interest, the Implementing Agency/ Contracting Authority typically retains the right to terminate the contract early and, in such a situation, the private party is usually entitled to full compensation. This should encompass the recovery of all outstanding equity funds invested, compensation for breaking contracts with third parties, including outstanding loans and interest, financial debt breakage costs, other contract and sub-contract breakage costs, and demobilization expenses. Additionally, a sum should be included to cover the loss of future profits under the contract.
- **Termination due to default by the Implementing Agency/ Contracting Authority:** Contracts typically include provisions that allow the private party to terminate the contract and seek reimbursement for all costs and expenses if the Implementing Agency/ Contracting Authority fails to fulfill its obligations. This option is often available if the Implementing Agency/ Contracting Authority significantly violates the terms of the contract, including the non-payment of monies due under the contract. The compensation paid in case of Implementing Agency/Contracting Authority default is generally calculated using the same formula as that for termination for convenience.
- **Termination due to force majeure:** If a force majeure event significantly affects the contract for a defined period, either party may choose to terminate the contract. It is generally accepted that the force majeure risk should be shared between both parties and accordingly reflected in the calculation of the termination payment.
- **Termination due to default of the private party:** In cases where the private party is in breach of its obligations, such as repeated or significant breaches under the contract, the Implementing Agency/ Contracting Authority usually has the right to terminate the PPP Contract. If the breach is due to the sub-contractor's insolvency or lack of responsiveness, it is advisable for the private party to be given the opportunity to replace the sub-contractor. In the event of a termination for default, it is recommended that the contract should allow the lenders to step in and rectify the default. However, if the default is still continuing after an agreed period of time, then the lenders should receive a partial (not full) compensation payment.

6. PPP Procurement Stage

6.1. Overview of the PPP Procurement Stage

Box 6.1 Overview of the PPP Procurement Stage

This section introduces the PPP Procurement Stage, covering the launch of the project (through a Request for Qualification (RFQ) and/or Request for Proposal (RFP)) to receiving and evaluating proposals, contract award and financial close. In particular:

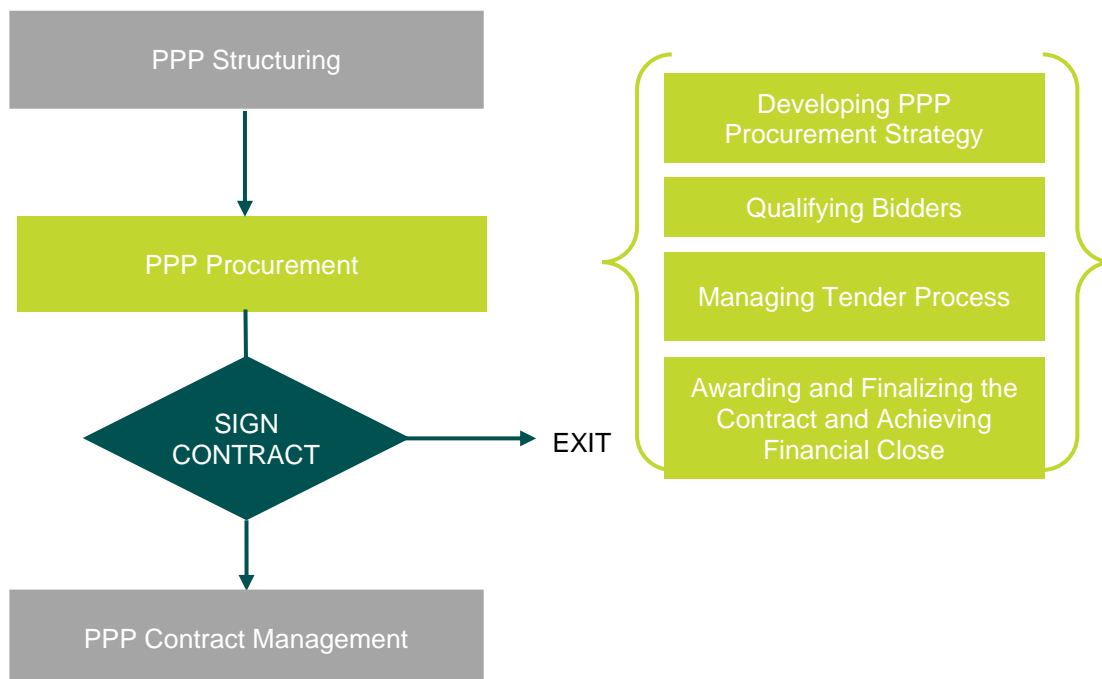
- Conducting a competitive and transparent procurement process for a PPP project.
- Developing a tender package including RFQ and/or RFP based on the tender process.
- Running the tender process including bid preparation, bid submission, and bid evaluation.
- Awarding the tender and achieving financial close.

A well-designed and transparent PPP procurement process enhances competition between potential private parties in the market and leads to the selection of the most qualified private partner to deliver the optimal Value for Money (VFM) outcome for the Implementing Agency/ Contracting Authority.

The key steps in the PPP procurement process are as follows:

- Developing a PPP procurement strategy
- Qualifying potential bidders
- Managing the tender process (inviting and evaluating proposals)
- Awarding and signing the contract
- Achieving financial close

Figure 6.1 Overview of PPP Procurement Stage



6.2. Developing a PPP Procurement Strategy

6.2.1. Organizing a Procurement Team

To successfully procure a PPP project, it is crucial for the Implementing Agency/ Contracting Authority to establish a strong PPP procurement team (or Project Management Unit) that consists of professionals with diverse expertise and backgrounds who can collaborate in a well-coordinated manner. Given that many Implementing Agencies/ Contracting Authorities often lack the necessary skills and expertise to properly structure and procure a PPP project, they often need to hire external professional transaction advisors.

The typical composition and responsibilities of each team member are described below:

Project Leader

- Oversees and manages the entire process of the transaction
- Supervises the work tasks and teams involved
- Manages project timelines
- Resolves any conflicts or issues that arise among stakeholders
- Engages with high-ranking government officials
- Directs communications with bidders
- Approves both internal and external communications
- Performs any other tasks that are required to successfully complete the project

Transaction Advisor(s)

- May be a single firm or a consortium of experts in policy, legal, financial, and technical fields
- Helps to identify potential bidders through market sounding efforts
- Supports the procurement process such as notifying interested parties, managing data rooms and bid clarifications and conducting bid workshops
- Advises on the evaluation framework and supports the bid evaluation process

Legal Team

- Reviews submissions for completeness and compliance
- Leads the development of the PPP contract
- Leads the development of RFQ/RFP documentation
- Leads the clarification process for RFQ and RFP documentation
- Conducts legal bid evaluations

Technical Team

- Establishes the technical scope and criteria for the project
- Proposes technical bid evaluation criteria
- Reviews technical submission material and prepares summaries
- Ranks submissions based on technical criteria
- Presents evaluation results to the Project Leader and the Evaluation Committee

- Identifies technical issues and assists the Project Leader in resolving them

Financial Team

- Develops the financial model for conducting the financial feasibility, affordability, and VFM assessments
- Reviews bidder comments related to financial matters and prepares responses
- Reviews financial bid submissions and prepares summaries
- Ranks submissions based on pre-set financial criteria
- Presents evaluation results to the Project Leader and the Evaluation Committee
- Identifies financial issues and assists the Project Leader in resolving them

Evaluation Committee

- Constitutes independent subject matter experts from the government and/or external advisors
- Approves the bid evaluation process and evaluation criteria
- Evaluates all the bid submitted by the bidders based on the evaluation criteria set forth
- Reviews the evaluation work presented by the advisory teams
- Recommends the most competitive bidder for awarding the project

6.2.2. Selecting the Tender Process

The tender process can typically be divided into four stages:

- **Qualification:** This stage establishes the minimum standard for the capabilities of bidders seeking to enter into a PPP Contract. It may be conducted as a separate pre-qualification phase under a two-stage tender process or incorporated as a section of the bid proposal in a one-stage tender process.
- **Bid period:** This stage encompasses the period from the launch of the tender process until the deadline for bid submission.
- **Bid preparation and submission** (from the bidders' perspective): This stage includes the process of preparing and submitting the technical, financial, and legal proposals by the bidders.
- **Bid evaluation and award:** During this stage, the Implementing Agency/ Contracting Authority receives, analyzes, assesses, evaluates, and selects the preferred bidder based on pre-established criteria.
- **Contract signature and financial close:** Once the preferred bidder has been selected, this stage involves the negotiation and finalization of the PPP Contract, culminating in the financial close of the project.

Generally, there are two types of tender processes:

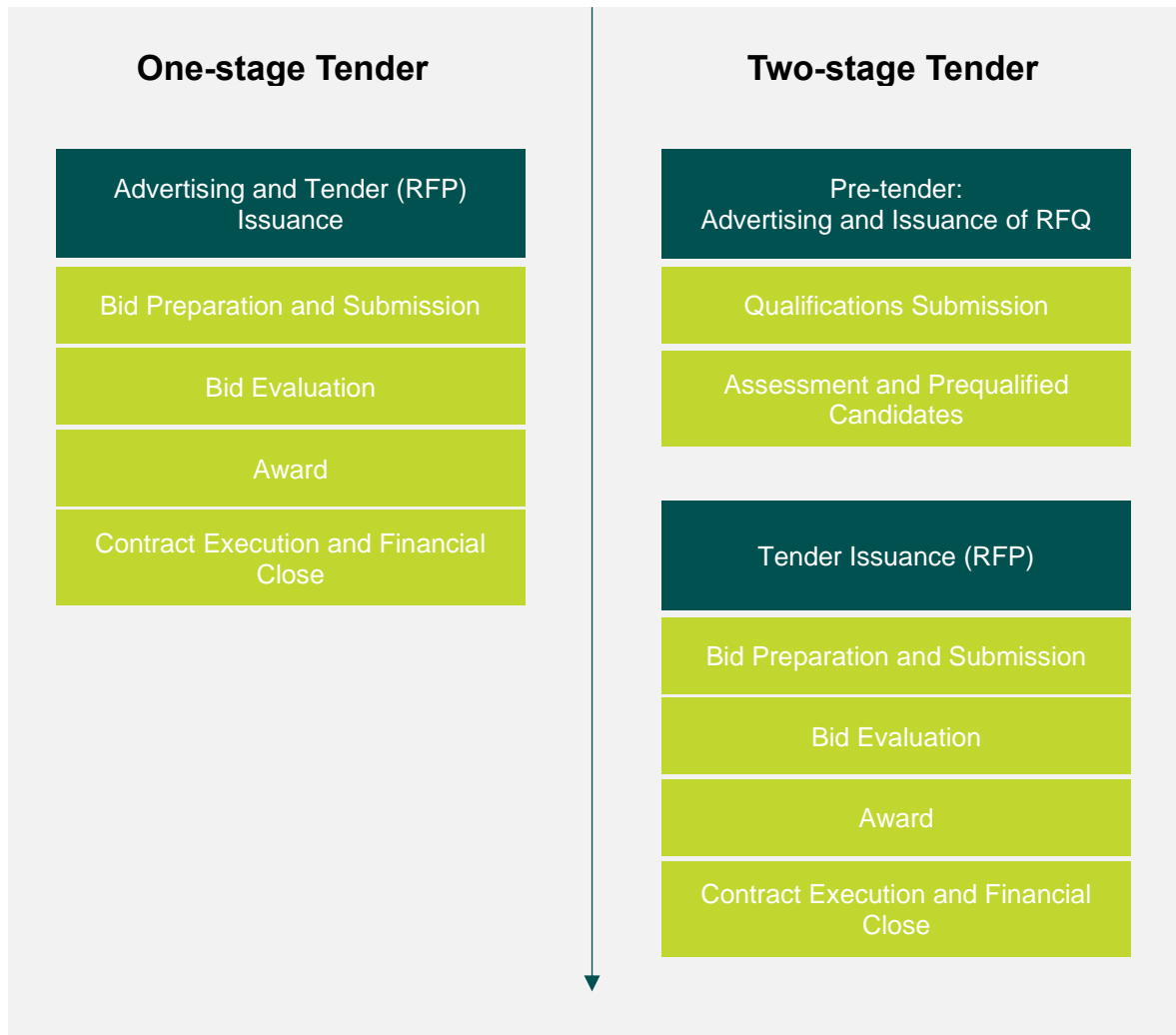
One-stage Tender Process

In the one-stage tender process, the RFP and the contract are typically issued together, and the qualification requirements are included in the proposal requirements. This means that bidders are required to submit both their technical and financial proposals at the same time as their qualifications, all in one comprehensive proposal. The one-stage tender process is usually faster than the two-stage tender process, but it may lead to more unqualified bidders submitting proposals, as there is no pre-qualification phase.

Two-stage Tender Process

In a two-stage tender process with pre-qualification, potential bidders are first invited to submit their qualifications before the RFP and contract documents are issued. This pre-qualification stage is open to any potential bidder, and there is no shortlisting at this stage. However, only those bidders that have prequalified are invited to participate in the second stage, which involves the issuance of the RFP and contract documents.

Figure 6.2 Steps in One- and Two-Stage Tender Processes



6.2.3. Other Critical Considerations

During the procurement process, the Implementing Agency/ Contracting Authority seeks to select the most suitable private party for a project, and the objective is to ensure that several qualified private parties respond to the project opportunity to encourage competitive tension in the bidding process.

Bidders will need sufficient time to prepare high-quality proposals, which will include learning about the project, exploring partnership options, sending due diligence teams and drafting technical and price proposals. Adequate time is also necessary for bidders to engage with investors and lenders to secure financing.

Therefore, to encourage private parties to submit high-quality proposals, it is important that the Implementing Agency/ Contracting Authority provides adequate time for responding to the RFP.

6.3. Qualifying Bidders

6.3.1. Preparing and Issuing the Request for Qualifications (RFQ)

The RFQ is a crucial step in the procurement process, as it outlines the requirements for bidders to be considered for qualification. The goal of qualification is to reduce the chances of project failure by ensuring that potential bidders possess the necessary capabilities to handle the project's various functions, such as equity investment, finance raising, construction, and operation and maintenance (O&M). This is done to avoid any potential bidder weaknesses, such as insufficient financial resources or inexperience, which may contribute to project failure.

The RFQ, which outlines the criteria for bidder qualification, can either be included in the RFP for a one-stage tender process or be a separate stage before issuance of the RFP in a two-stage tender process.

Regardless of the method, it is important that 'qualification' occurs prior to the opening of the bids to ensure a fair and transparent process.

The customary classification of qualification criteria is represented by three main categories.

- Administrative/ legal
- Financial-economic capacity
- Technical capability and experience, including sustainability requirements, such as green certifications specific to the sector under consideration

Only the latter two are considered for evaluating and selecting a short list, as the administrative and legal criterion is usually a pass/fail requirement.

Legal Qualification

Legal qualification is a critical aspect that bidders must fulfill before submitting their bids according to the country's regulations or market. Essentially, legal qualification relates to the formal compliance of the bidder with a country's legal requirements, especially with regards to its legal identity. To demonstrate their eligibility, bidders are required to submit specific documents such as proof of their existence and good standing under the relevant laws, together with consortium agreements and proof of the commitment of the respective members.

Additionally, if a foreign company is operating in the country, evidence of registration or license to operate in that country issued by the relevant authority is required.

Financial and Economic Capacity

The financial or economic capacity criteria play a crucial role in ensuring that the bidding company or consortium is financially sound and capable of meeting the project's financial requirements. These criteria assess whether the bidder has access to adequate funds to meet the equity needs and can raise long-term debt from third-party sources.

Financial ratios, liquidity ratios, and specific ratios for the project, such as equity to project capital expenditure (CAPEX), are commonly used as indicators.

Technical Capacity and Experience

The technical qualification criteria outline the key characteristics that the Implementing Agency/ Contracting Authority seeks in a private party for the project. It encompasses all the functions that the party will need to perform. Demonstrating relevant experience is perhaps the most complex set of criteria for qualifying bidders. The technical capacity and experience of the prospective bidders can be demonstrated in multiple ways, including:

- **Construction experience:** The bidder (individual or consortium) must provide evidence of successful experience in constructing a similar project, in the same sector, and with similar features of the project in terms of size and complexity.
- **Operations and maintenance:** The bidder (individual or consortium) should provide evidence of previous or ongoing experience in operating and/or maintaining similar infrastructure in the same sector, with similar features as the project in terms of size and complexity, and/or volume or number of users.
- **PPP management, PPP investment and financial close:** The bidder (individual or consortium) should have experience in successfully developing similar projects, including successfully reaching financial close and/or successful development through the operation period.

The technical capacity and experience indicators are diverse and will very much depend on the project type, sector, and technology required for the project.

A typical technical capability sub-criteria list includes:

- Total revenues earned by the relevant business (from construction, O&M, or PPP ownership/management).
- Total CAPEX for construction and/or the number of projects developed.
- Total amount of debt raised across the PPP portfolio of the consortium.
- The number of relevant or similar projects within the PPP portfolio, with a minimum size or threshold, depending on the sector.
- The aggregated number of users or population served in the PPP contracts within the PPP portfolio, which will vary according to the sector.

The pre-qualification or qualification document also covers various other aspects related to the submission of bids, such as the time period for submission, format and documents required, and the type of evidence needed to demonstrate qualifications, particularly experience.

The document also outlines guidelines on issues such as conflicts of interest, incompatibilities, or alterations in the composition of a pre-qualified consortium during the bid submission stage.

Additionally, it provides a brief overview of the project and the expected contractual structure.

6.4. Managing the Tender Process

6.4.1. Preparing and Issuing the Request for Proposal (RFP)

The RFP sets out the bid requirements, including the required documents and their format, as well as the evaluation process, such as the criteria and methods used for selection. It should also provide comprehensive details with respect to the project itself, including the technical, legal and financial aspects of the project. It should also include provisions to protect the Implementing Agency's/ Contracting Authority's interests, such as the right to cancel or negotiate. The tender process, including procedures for submitting questions, conducting one-on-one meetings, and setting time limits for proposals, will also be detailed in the RFP. Additionally, the RFP should specify the validity period of proposals and the conditions that must be met before a contract can be signed.

Typical RFP Components

- **Deadline:** The bidders should be given adequate time to conduct the necessary due diligence and prepare a quality offer.

- **Validity:** Proposals should have a specific validity period post submission to give the Implementing Agency/ Contracting Authority time to evaluate the bids and negotiate with the preferred bidder and protect bidders from undue delays in awarding the project.
- **Proposal documents:** The required documents must be consistent with the RFP's evaluation criteria and submitted in different envelopes.
- **Bid bond or proposal guarantee:** A guarantee should be submitted with the bid package to protect the Implementing Agency/ Contracting Authority against the risk of the successful bidder failing to sign the contract.
- **Financial model and financing proposal:** The financial model and financing plan should be submitted to ensure that the bidder's financial proposal is robust and financially viable.

Evaluation Criteria and Approach

There are two main types of processes in terms of evaluation criteria:

- Processes based only on price (also referred to as least cost selection) in which the technical factors are evaluated on a pass/fail basis.
- Processes based on price in combination with qualitative factors that basically relate to the quality of the technical offer. This is sometimes referred to as a Quality and Cost Based Selection (QCBS).

Price-only evaluation

If a selection is solely based on price, the technical criteria are pass/ fail. This implies that only proposals that meet the minimum technical criteria are evaluated based on price. However, among the proposals that qualify technically, only the price is then considered for selection.

Price and quality evaluation

The most widely used evaluation method, is to consider both the quality and price of the technical proposal.

Typical qualitative and/or technical criteria include:

- Criteria related to construction, such as project design quality, construction period reliability, and quality assurance methods for construction oversight.
- Criteria related to operation, such as quality and reliability of operating procedures and manuals, and service or O&M quality management systems or plans.
- Criteria related to maintenance, such as quality and reliability of maintenance plans and programs, renewal/major maintenance programs, and specific plans for hand-back.
- Criteria related to environmental and social compliance and sustainability, including landscape factors, and resilience to climate change impacts.
- Criteria related to health and safety plans.
- Other qualitative criteria, such as those related to benefits for minority or disadvantaged populations, impacts on gender equality, financing reliability etc. These are usually set as a minimum bar or condition, such as the number of minority community members provided with employment by the project or consortium.

6.4.2. Receiving and Evaluating Proposals

The evaluation of proposals must be conducted based on the criteria outlined in the RFP. There is a significant difference in the evaluation process between a price-only evaluation and the evaluation of a combination of quality and price criteria.

Irrespective of the evaluation process used, the process is more complex than evaluating conventional public procurement bids. Clear evaluation rules and robust and transparent decision-making processes are critical to reduce the incidences of non-compliant evaluation processes.

Price and Quality Evaluation Process

In many countries, the evaluation process for PPP projects is carried out in stages, typically starting with a technical/ qualitative evaluation, followed by a financial/ economic evaluation.

To ensure fairness and transparency, it is crucial to keep the different elements of the evaluation process separate through physical and informational barriers. Those involved in the technical evaluation should not have access to details of the financial evaluation and vice versa.

6.5. Awarding and Signing Contract

6.5.1. Awarding and Finalizing the PPP Contract with the Preferred Bidder

Negotiation with a Preferred Bidder

If contract negotiations occur post initial bid, it is essential to ensure transparency and fairness in the process by requiring the preferred bidder to resubmit their proposal and have it reevaluated to ensure that it still meets the necessary criteria and that it is still evaluated as being the preferred bid. This practice is crucial to maintain fairness, transparency and VFM and ensure the appropriate awarding of the contract.

Vetting and Award

Once the tender has been evaluated based on the criteria specified in the RFP, and any negotiations have been successfully concluded, the relevant authority will make the award decision.

In some jurisdictions, upon the contract award decision from the Implementing Agency/ Contracting Authority, the PPP Contract is then legally vetted and submitted to a senior government authority for final approval. Once all necessary approvals have been obtained and any challenges have been resolved, the award decision becomes final. Following the definitive awarding, the preferred bidder will be invited to sign the contract.

6.5.2. Contract Signing and Financial Close

After the contract has been awarded, the next step is for the contract to be signed by both parties. The preferred bidder is required to sign the contract within the period prescribed in the RFP upon award.

Before the deadline, the successful bidder must meet certain Condition Precedents (CPs) as established in the RFP. These typically include establishing a Special Purpose Vehicle (SPV) that will be the counterparty to the Project Contract, contracting of insurance policies (or in some cases, proving that insurance is available under the terms required by the RFP and contract), and providing any performance guarantees required in favor of the Implementing Agency/ Contracting Authority.

Once all the CPs are met, the PPP Contract will be signed with the SPV. If the preferred bidder is unable to fulfill all the CPs before the deadline or refuses to sign the contract, the Implementing Agency/ Contracting Authority may apply liquidated damages and/or make a call against the bid bond (if a bond or guarantee was required with the bid submission). In such cases, the Implementing Agency/ Contracting Authority will usually invite the second ranked bidder to sign the contract or may decide to re-issue the tender.

Financial close occurs after contract signing when the financial documents have been signed and all the conditions precedent for the availability of financing have been fulfilled. The time between contract signature and financial close varies among different jurisdictions. The Implementing Agency/ Contracting Authority needs to validate the financial agreements to check that they do not contravene the provisions of the PPP Contract or represent any direct risk or additional responsibility not considered in the PPP Contract. Generally, it is in both parties' interests to promptly achieve financial close so that the project can proceed with available and sufficient finance.

7. PPP Contract Management Stage

7.1. Overview of the PPP Contract Management Stage

Box 7.1 Overview of the PPP Contract Management Stage

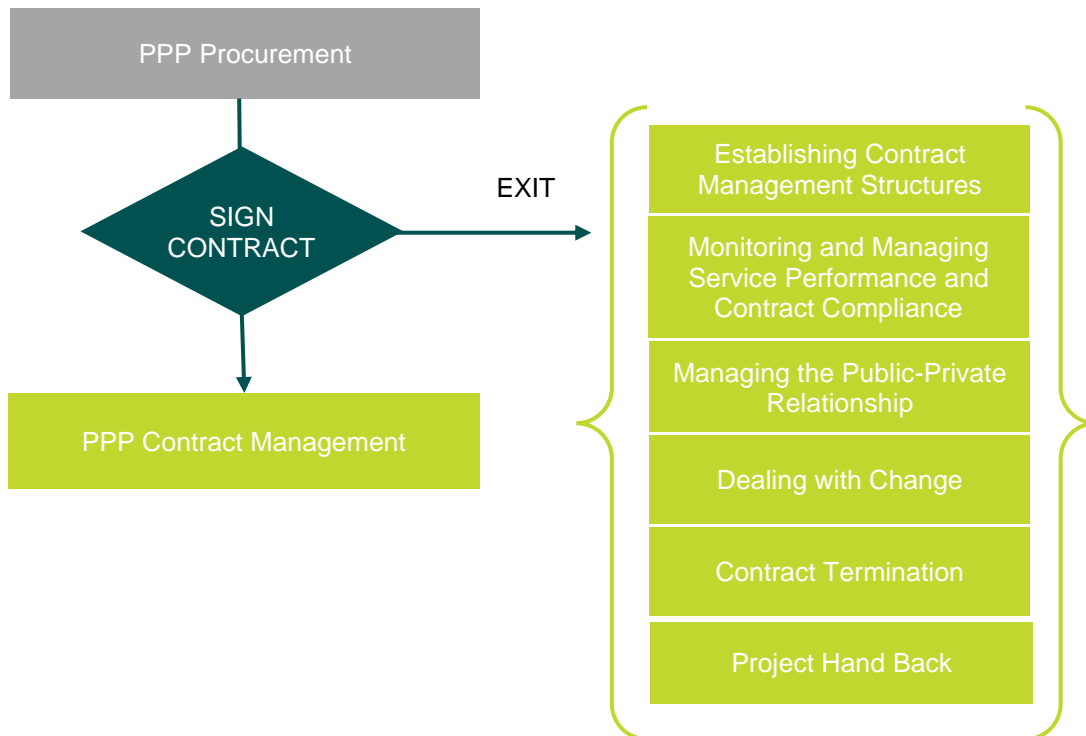
This section introduces the PPP Contract Management Stage after the PPP contract is signed and financial close has been achieved. In particular, the need to:

- Establish basic contract management structures.
- Implement PPP contract management and PPP monitoring frameworks including governance structures, roles and responsibilities, establishing and implementing contract administration, and relationship and performance management.

While good project preparation and efficient procurement are both essential for a successful PPP project, its ultimate success primarily depends on how well the PPP Contract is monitored and managed during the implementation stage. This stage plays a vital role in delivering the Value for Money (VFM) that the Implementing Agency/ Contracting Authority anticipated during the PPP Procurement Stage of the service or asset they contracted.

The PPP Contract Management Stage is distinct from earlier stages and involves an ongoing process, rather than a one-time activity. This stage lasts much longer than the preceding phases and covers multiple stages of the project's life cycle from construction through to operation. The PPP Contract Management Stage also involves the ending of the contract and the transfer of the project from the concessionaire to the Implementing Agency/ Contracting Authority (hand back).

Figure 7.1 Overview of PPP Contract Management Stage



7.2. Establishing Contract Management Structures

7.2.1. Establishing a Contract Management Team

Following the signing of the PPP Contract, the responsibility of managing the contract typically shifts to a dedicated team established by the Implementing Agency/ Contracting Authority. This team will be responsible for the daily management of the contract and is often referred to as the Project Management Unit (PMU).

To ensure a seamless transition from procurement to contract management, the Implementing Agency/ Contracting Authority should involve the proposed contract management team members as part of its project team during the later stages of the procurement process (if not earlier). This will enable the contract management team to gain a thorough understanding of the project and its associated risks from the beginning, thereby enabling the development of a practical contract management plan.

The contract management team has various responsibilities, which can be classified as primary and secondary roles. The primary roles pertain to the PPP Contract and involve ensuring that the private party delivers the project's objectives and provides VFM. On the other hand, the secondary roles are broader and involve fulfilling public policy objectives and communicating with stakeholders outside the purview of the private party's accountability.

Primary roles and responsibilities include:

- Acting as the representative of the Implementing Agency/ Contracting Authority to protect its interests by fulfilling contractual obligations and enforcing its rights.
- Monitoring the performance of the private party to ensure adherence to the specified services and implementing payment or penalty mechanisms.
- Collaborating with the private party to achieve project objectives.
- Undertaking stakeholder management and resolving disputes that may arise under the PPP Contract.
- Managing changes to the contract, including variations and amendments, in alignment with public policy and legal requirements to optimize VFM.
- Overseeing the management of project assets, ensuring proper maintenance, accounting, and reporting.
- Adjusting user charges in line with the PPP Contract, public policy, and legal guidelines.
- Monitoring the project's financial performance based on periodic reporting provided by the private party.
- Reporting the direct and contingent fiscal obligations to the Implementing Agency/ Contracting Authority resulting from the project and any changes to those obligations.
- Monitoring, evaluating, and reporting on the project's progress.

Secondary roles and responsibilities include:

- Facilitating communication and collaboration between different government entities.
- Keeping track of the policy and legal framework surrounding the project.
- Ensuring the integration of the project with other public services, programs, and projects.

7.2.2. Defining Contract Management Procedures and Formulating the Contract Management Manual

In addition to defining roles and responsibilities, the Implementing Agency/ Contracting Authority must establish process-related structures to facilitate effective contract management. These structures include:

Within the Implementing Agency/ Contracting Authority/ PMU and other public sector stakeholders:

- Procedures for reporting
- Channels for sharing information (particularly with the MOF)
- Processes for obtaining internal approvals

Between the Implementing Agency/ Contracting Authority/ PMU and the SPV:

- Protocols for communication
- Procedures for escalating decision-making
- Procedures for escalating dispute resolution

A Contract Management Manual is often used to formalize these processes. This manual should outline the responsibilities and expectations of the Implementing Agency/ Contracting Authority/ PMU, as well as how to monitor the private party's progress. The manual can help all parties involved and provide internal procedures for different departments. For projects with multiple stakeholders, the manual can be expanded to include interactions among them.

7.3. Monitoring and Managing Service Performance and Contract Compliance

To ensure that the SPV meets the agreed performance standards, the Implementing Agency/ Contracting Authority/ PMU must have a clear understanding of the performance criteria specified in the PPP Contract, as well as the contractual framework that incentivizes positive performance and penalizes any non-compliance. Furthermore, the establishment of an effective monitoring system is crucial. This is commonly referred to as a three-level enforcement system:

Performance criteria

The SPV's performance is evaluated based on a set of criteria included in the PPP Contract, which is commonly referred to as output-based performance requirements or Key Performance Indicators (KPIs). As highlighted earlier, these requirements focus on measuring outputs rather than inputs.

Monitoring system

The monitoring reporting system requires the SPV to keep track of its performance and provide regular updates to the Implementing Agency/ Contracting Authority/ PMU. To monitor the SPV's performance, the Implementing Agency/ Contracting Authority/ PMU may verify the SPV's data and monitoring system itself or bring in an independent auditor or expert to conduct a separate evaluation.

Financial incentives

The monitoring and contract management process to check for compliance with the project's KPIs should enable the Implementing Agency/ Contracting Authority/ PMU to administer the payment mechanism governing the project. This may entail adjustments to any government payments so as to impose penalties for non-compliance.

It is essential to maintain effective communication between all involved parties across all stages of the three-level enforcement system. Clear communication following established procedures is crucial to avoid misunderstandings and minor issues from becoming significant.

7.4. Managing the Public-Private Relationship

7.4.1. Principles of Partnership

The partnership between the public sector and the private sector is guided by three primary principles: establishing trust, defining limits, and being flexible in the face of challenges and changes.

The foundation of any successful partnership is built on trust and a willingness to work together. However, it is essential to establish boundaries and be prepared to address conflicts as they arise. These boundaries should be established in all aspects of the relationship, including challenging ones, to ensure consistency. Some examples of these boundaries include following official procedures for changes to service provision, adhering to predetermined limits on gifts or invitations, and utilizing formal communication and administrative processes where appropriate.

Without implementing the fundamental principles of a successful partnership, problematic situations can arise e.g.

- The partnership may result in the disregard of agreed protocols and contract terms, which may give rise to integrity concerns, leading to conflicts of interest and corruption of the monitoring process.
- Distrust between parties can cause frictions leading to conflicts that could have been mitigated had a more cohesive partnership built on trust been established to resolve issues.

There are some practical ways to try and prevent problematic situations:

- **Partnering sessions:** Regular meetings on the project and collaboration can establish formal and informal channels of communication during the various stages of contract implementation. These meetings can be organized at various levels, including executive, principal and working team levels.
- **Protocols:** Establish a well-defined communication protocol framework and adhere to it for all forms of communication.
- **Records:** Keep records of communications between all parties, especially between the Implementing Agency/ Contracting Authority/ PMU and the SPV.
- **Committees and joint offices:** Public-private committees and/or joint project offices (where multiple parties are co-located) can accommodate frequent and open communication. They can also aid in detecting and addressing issues in their initial stages before they become more significant disputes that need to be addressed through a formal resolution process.

7.4.2. Stakeholder Management

Stakeholder management is critical as the success or failure of a PPP project is related very much to stakeholders' perceptions of the 'value' created by the project.

The primary goal of stakeholder management at the project level is to ensure that the relevant individuals or groups are appropriately engaged and lobbied to ensure their continuous support for the project. In addition to the direct beneficiaries or parties involved, stakeholder groups may include critical suppliers, various government and regulatory bodies, community groups, and third-party investors, among others, who have a financial, business, or political interest in the project's outcome. When establishing relationship interfaces, all such stakeholders should be considered.

Even if the private party has assumed the risk of dealing with a specific stakeholder under the PPP Contract, the PMU can still play a role in supporting the private partner in informing that stakeholder about the project and ensuring that they do not unnecessarily delay its progress.

In projects where the government is not the end-user, involving end-users in the early stages of the project implementation process is crucial. Failing to consult end user stakeholders can result in delays in project implementation and create difficulties in contract management.

To ensure effective communication with stakeholders, it is good practice to establish a database of key stakeholders at the start of the project and update it regularly. A dedicated website can facilitate communication and disseminate important messages. During the construction phase, it is critical to appoint an experienced person or company to design and implement a robust stakeholder communication strategy, as opponents may seek to obstruct the project's construction, creating a focal point for criticism among the local communities.

7.5. Dealing with Change

7.5.1. Changes in Ownership and Scope of Works

Change in ownership

The private party under a PPP arrangement may seek to change its shareholding arrangements and ownership. Such changes should generally be permitted, unless they increase government risk or reduce public benefits.

However, there is a potential risk associated with selling shares to unsuitable shareholders, especially if the original shareholders have committed to retaining their stake. To address this, the Implementing Agency/ Contracting Authority may decide to retain the right to approve any changes in shareholdings that may impact beneficial ownership or control. In such cases, the PPP Contract should clearly define "change in control" and "beneficial ownership" and may include restrictions on share disposal for a specified period.

Lenders also have a legitimate interest in limiting changes of control and requiring shareholders to maintain their stake. Therefore, government approval for any changes in shareholdings/shareholders should not impede the lenders' rights to separately protect their interests by not approving such changes.

Change in the scope of works

Managing the scope of a PPP project on an ongoing basis is crucial to ensure that it continues to meet the requirements of the end users. The output specifications outlined in the PPP Contract should consider the Implementing Agency's/ Contracting Authority's present and potential requirements that can be identified and quantified. However, modifications to the output specifications post contract award may be necessary to accommodate changes in the government's requirements that were not anticipated or quantified at the start of the contract. Changes may also be necessary due to external factors for which the government has retained responsibility, such as a change in policy.

It is important to clearly identify the source of the change (private party, government, or external events) and the impact that the change will have in terms of costs and timing. Regardless of the source of the change, changes to the scope should be handled systematically and in compliance with the terms of the PPP Contract.

During the construction phase, changes to the scope of work are more likely to occur as both the private party and the Implementing Agency/ Contracting Authority will be able to develop a better understanding of how best to meet the output specifications. Irrespective of the initiator of the change, a formal process should be in place to identify and agree scope changes. Typically, this involves issuing a variation notice from one party to another, outlining the costs, risk implications, and changes

to the specifications. Clear identification of the cost implications and who is responsible for such costs is crucial, and approval from the appropriate decision-makers should be sought based on the magnitude of the change.

7.5.2. Amendments and Renegotiation of Contracts

Managing the project's changing environment and emerging risks through amending and adapting contracts is key to de-stressing projects, particularly projects that have a long lifecycle.

However, adjusting or renegotiating contracts should be kept to a minimum for the following reasons:

- The original benefits from competitive bidding can be compromised by conducting renegotiations through bilateral means.
- The benefits to the government of entering into a PPP can be diminished by renegotiations, which may adversely impact VFM.
- Renegotiation could lead to a legal challenge from one or more of the losing bidders.

7.5.3. Disputes and Resolution

The PPP Contract must specify the applicable legal framework governing the contract and the procedures, along with tools, for resolving conflicts/disputes.

Dispute management procedures are normally left to individual PPP contracts to arrange the most suitable way for the parties to avoid disputes and the development of a 'blame culture'. However, a collaborative problem resolution method should be implemented, which involves creating a structured process, agreeing to seek mutually beneficial outcomes, fostering a culture of open communication and fair treatment, while recognizing that conflict wastes resources.

There are generally 5 dispute resolution options, the first four of which are non-judicial mechanisms, while the last is within the purview of the judicial system:

- Expert determination of some kind (normally used for specific technical/financial issues)
- Mediation and conciliation
- Arbitration (national or international)
- A decision by a relevant regulatory body
- Litigation

The selection of the dispute resolution mechanism will usually depend on:

- The history and nature of the dispute
- The relationship between the parties
- The sensitivity of the issues involved
- The likely outcome and cost of litigation

Expert Determination

In PPP Contracts, if disputes arise that cannot be resolved, negotiations are typically initially carried out between senior employees of both parties as the first step in resolving the conflict. Independent experts can also be appointed to provide an objective view. When it comes to resolving technical issues, an impartial expert or a panel of experts can be consulted as the preferred method of dispute resolution. Whether the decision given is binding or not depends on the terms of the PPP Contract.

Mediation

Mediation aims to meet the requirements of both parties involved in a dispute and maintain their relationship in the future. A neutral third-party mediator is selected to facilitate discussions between the parties towards a mutually acceptable solution. The mediator does not have any authority to make independent decisions or enforce any settlement. Its role is to guide the partners towards reaching an agreement.

Arbitration

Arbitration serves as a middle ground between the court-based approach of litigation and mediation for resolving disputes. It can be utilized both domestically and globally. International arbitration can be conducted under a permanent arbitration institution such as the International Centre for Settlement of Investment Disputes (ICSID).

Decision by Relevant Regulatory Body

The involvement of a regulatory body in the resolution of disputes in a PPP Contract depends on nature of the conflict and the contractual arrangement. In the case of PPPs in sectors that fall under the jurisdiction of an independent regulatory body, the regulator can be given the task of resolving specific disputes. Nevertheless, one should be aware that regulators may depart from the terms of the PPP Contract and apply their own set of principles. In case of an unstable regulatory environment, investors might consider this type of dispute resolution as unreliable and uncertain.

Litigation

If alternative dispute resolution methods such as mediation or arbitration fail, litigation may be considered as the last option for resolving a conflict. Before proceeding with litigation, it is crucial to determine whether the legal system of the host country is appropriate for settling disputes between the parties involved.

7.6. Contract Termination

7.6.1. Termination at the End of the PPP Contract Term

Termination will often include the handing of the project assets back to the Implementing Agency/ Contracting Authority at the end of the PPP contract term (see 7.7 for more details). Transferring the assets to the Implementing Agency/ Contracting Authority requires a thorough assessment of the quality of the assets prior to hand back. The PPP Contract usually specifies the standards that the assets and facilities are required to meet when the contract period ends.

Before the termination date, an assessment should be conducted by the Implementing Agency/ Contracting Authority to determine the condition of the assets. The assessment will identify which assets require improvement before being handed back. This process is essential because the project assets (e.g., a road, hospital, school, or power station) will likely still have a useful life and, as such, will serve as an asset for the Implementing Agency/ Contracting Authority even after the PPP Contract has expired.

Therefore, the Implementing Agency/ Contracting Authority should have a strong financial interest in ensuring that the asset is returned in a condition that best serves the desired operation outcomes after the PPP contract term.

7.6.2. Early Termination

The PPP Contract should provide for the circumstances under which the contract may be terminated by either party before the end of the contract. Early termination events include:

- Termination due to force majeure
- Termination due to private party default
- Termination due to Implementing Agency/ Contracting Authority default (including non-payment, termination for convenience, termination due to Material Adverse Governmental Actions (MAGA))

The PPP Contract should include clear guidelines and clauses for the early termination of a project, outlining the process and addressing the associated obligations, liabilities, and potential compensation for the non-defaulting party (see 5.3.5). When it comes to compensation, the general principle to follow is the "make whole" principle. This means that the party not at fault for the termination should be compensated in a manner that preserves their expected returns as if the contract had not been terminated early.

7.7. Project Hand Back

The final phase of PPP Contract Management involves project hand back. This entails managing the transition of assets and operations at the end of the contract term. The contract should clearly define the approach to project hand back, including criteria for assessing asset quality, payment conditions upon hand back, and the calculation method for such payment. The contract may also specify detailed hand back requirements or involve an independent assessor in the process.

Timely and effective compliance with the hand back criteria is essential and requires diligent management. The contract management team must be well-versed in the agreed hand back conditions and ensure that all necessary preparation, maintenance, and asset management tasks are completed to meet post-contract requirements.

To mitigate the risk of asset deterioration prior to hand back, certain contractual protections can be provided in the PPP Contract. These include clearly defined asset hand back standards to prevent substandard conditions and requiring the private entity to maintain the asset in accordance with hand back standards for a specified period.

Another effective approach to mitigating such risk is withholding a portion of the payments owed to the private party and allocating them to a reserve fund to cover any potential expenses needed to ensure that the asset meets the relevant technical hand back standards. By deducting payments, the private party is motivated to undertake the necessary works itself before the asset is returned, as it commonly prefers to manage the costs involved in performing such works itself rather than allowing the procuring authority to carry them out using funds from the reserve account.

Both parties involved in a PPP contract should have a mutual interest in initiating preparations for the handover well before the contract's conclusion. This proactive approach serves two key purposes: first, to ensure that the condition of the project assets align with the expectations of the government, and second, to provide sufficient time for a smooth transition in cases where a new operator, including a new government operator, will assume responsibility. This time frame allows the new operator to effectively mobilize and ensure the uninterrupted provision of public services.

Depending on the size and complexity of the asset, planning for hand back may need to commence several years before the PPP Contract's expiration. This allows for the identification of procurement strategies and potential operations contracts to ensure service continuity after hand back.

An effective hand back plan should focus on two primary areas: ensuring that the asset meets contractual hand back requirements and ensuring the continuity of the services post hand back.

After hand back of the asset to government, there are several options for the government to deal with the asset based on its condition.

If the asset has a remaining useful life at the contract expiration date, the government may continue operating the asset to gain extra revenue benefit by using either an in-house operation and management team or outsourcing to a third-party operator depending on the internal capacity and/or preference of the government. The third-party operator to which the asset is outsourced may be the same party as in the existing PPP Contract. However, the new contract will be an O&M concession or service contract.

In some PPP delivery models, the duration of the first concession contract may not match the designed useful life of the asset. Thus, after the expiry of the existing contract, the concession may be renewed via a new at-risk long-term management or service contract that can be regarded as a new PPP.

Where there is no remaining useful life (or no extra social-economic benefits over costs for further operation) for the asset, the government may decide to decommission the asset.

GLOSSARY

Affermage Contract

A contract where a government entity appoints a private operator to operate and maintain the infrastructure asset, but not to finance the investment.

Build Contract

A contract that solely involves the construction of the asset, with the design being undertaken by the public sector.

Build-Operate-Transfer

A PPP contract whereby the private sector constructs the asset in line with the output specifications set by the Implementing Agency/ Contracting Authority; operates the asset for the period specified in the contract; and transfers the asset back to the Implementing Agency/ Contracting Authority at the end of the contractual period.

Build-Own-Operate

A PPP contract type where the private party contractor constructs and operates the asset, without being required to transfer the ownership of the asset to a government entity at the end of the contractual period.

Cash Flow Available for Debt Service (CFADS)

Cash flow available for debt service is the amount of cash available to service debt obligations. Typically, it is calculated by netting out revenue, operating expenditure, capital expenditure, tax and working capital adjustments.

Condition Precedents

The pre-conditions in the financing agreement that have to be met by the private sector borrower before it can draw down on the financing provided by lenders.

Construction Contract

A contract for the design, engineering, procurement construction, start-up, testing, and commissioning of the project.

Construction/ EPC Contractor

A contractor appointed by the Special Purpose Vehicle (SPV) under a Construction Contract to construct the project.

Contracting Authority

The public sector entity that enters a PPP contract with the private sector and acts for the government in complying with and enforcing the terms and conditions of the PPP contract.

Contract Management Manual

A collection of guidelines that explains the government's duties and obligations, and processes and procedures that the relevant departments within the government should follow to successfully monitor the private party's progress and delivery.

Cost Benefit Analysis

An economic analysis that assesses the economic and social benefits of a project. The benefits of the project to society should be higher than the costs to the public for the project to proceed.

Debt Service Coverage Ratio

The ratio defined as the cash flows available for debt service (CFADS) for period t divided by the total amount required to service debt (principal and interest) for period t.

Design-Build Contract

A single contract that integrates the design and construction of the infrastructure asset.

Design-Build-Finance-Operate-Maintain

A PPP contract where the project scope for the private sector encompasses designing, building, financing, operating, and maintaining the asset.

Engineering, Procurement and Construction Contract

An alternate terminology for a Design-Build Contract or Build Contract, particularly when the contract primarily delivers (builds and constructs) an infrastructure asset rather than an infrastructure service.

Environmental Impact Assessment

A thorough due diligence exercise to identify, describe, and as far as possible, quantify and mitigate the environmental impacts of a project.

Economic Internal Rate of Return

A discount rate that makes the Economic Net Present Value of all cash flows considering lifecycle economic costs and benefits equal to zero in a discounted cash flow analysis.

Economic Net Present Value

The difference between the present value of cash inflows considering lifecycle economic benefits and the present value of cash outflows considering lifecycle economic costs over a period.

Feasibility Study

A detailed analysis of all the critical aspects of a proposed project, including technical, commercial, fiscal, environmental, social, legal, and economical and financial feasibility, and Value for Money (VFM) assessment to determine the likelihood of the project succeeding.

Implementing Agency

The government entity (national/ subnational) that enters into the PPP Contract with the private party.

Internal Rate of Return

The Internal Rate of Return (IRR) refers to the discount rate at which the Net Present Value (NPV) of all cash flows is equal to zero in a discounted cash flow analysis.

Key Performance Indicator

A quantifiable measure of performance over time for a specific objective.

Lender

In a PPP context, lenders are typically commercial banks or other non-bank financial institutions that provide debt financing to the SPV under a Loan Agreement and associated financing documents.

Loan Agreement

The formal contract between the borrower (SPV) and a lender that sets out the terms of the loan including loan amounts, interest rates, repayment profile, security, required reporting, covenants, and default clauses etc.

Loan Life Coverage Ratio

The ratio defined as the Net Present Value of all the future cash flows available for debt service from period t to the end of the loan divided by the total outstanding debt at periods t .

Management Contract

A contract that involves the private sector being responsible for the operation and maintenance of an existing infrastructure asset, while ownership of the asset remains vested with the government entity.

Net Present Value

The difference between the present value of cash inflows and the present value of cash outflows over a period.

Notice to Proceed

A legal document that is issued by the Implementing Agency/ Contracting Authority to inform a construction contractor of the date from which construction work is allowed to start.

O&M Contractor

A contractor that is appointed by the SPV under an O&M Contract to deliver operation and maintenance services for a completed project.

Operation & Maintenance (O&M) Contract

A contractual agreement whereby the SPV transfers responsibility for asset operation and maintenance services for the project to an O&M Contractor.

PPP Contract

An agreement between the Implementing Agency/ Contracting Authority and the private sector that regulates the rights and obligations of the public and private sector via commercial terms including performance requirements, payment mechanisms, adjustment mechanisms, dispute resolution mechanisms, and termination provisions, etc.

PPP Contract Term

A fixed term period during which the PPP Contract will be effective.

PPP Unit

A government organization responsible for promoting, facilitating and assessing PPPs in a country and advising the Implementing Agency/ Contracting Authority on the implementation of PPP projects.

Pre-feasibility Study

A preliminary systematic assessment of all the critical elements of the project ranging from technical, commercial, legal, financial and environmental and social impacts.

Privatization

A process through which a business or an asset that was previously owned and controlled by the government is transferred into private ownership and control.

Private Sector/ Private Party

The private sector entity that acts as a contractual counterparty to the Implementing Agency/ Contracting Authority in the PPP Contract.

Project Life Coverage Ratio

The ratio defined as the Net Present Value of all the future cash flows available for debt service from period t to the end of the life of the project, divided by the total outstanding debt at period t.

Project Management Unit

The public sector team that is responsible for the daily management of the PPP Contract.

Public-Private Partnership

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 remuneration is linked to performance.

Public Sector Comparator

The fiscal cost to the government of implementing the project through traditional public procurement compared with the fiscal cost of a PPP delivery option. The PSC is used to assess whether a PPP project provides Value for Money.

Public Sector Investment Plan

A development plan constituting a list of projects that are selected and prioritized to be developed fully or partially using public sector investment.

Quality and Cost Based Selection (QCBS)

A proposal evaluation process based on price in combination with qualitative factors that are primarily based on the quality of the technical offer (e.g., approach to design construction and O&M).

Request for Proposal

The tender package that is sent out to bidders requesting them to submit a proposal for the project. The RFP sets out, inter alia, the bid requirements, the evaluation process, the overall tender process, the process for submitting questions, the time limit to submit a proposal, the validity period of the proposal and prerequisite conditions for contract signature.

Request for Qualification

This is a request that solicits private sector parties to submit their qualifications to determine their eligibility to participate in the PPP tender.

Shareholder

In a PPP context, shareholders are equity investors, who hold an interest in the SPV.

Shareholders' Agreement

An agreement amongst shareholders of a PPP company setting out the shareholders' rights and obligations with respect to their interests in the company. The agreement also includes information on the management of the company and privileges and protection of shareholders.

Social Impact Assessment

A detailed due diligence exercise to identify, analyze, and to the extent possible, mitigate the social impacts of the project on the lives of people that live and work in the project's area of influence.

Solicited Proposal

This is a proposal that is submitted by the private sector in response to a formal request issued by the public sector.

Special Purpose Vehicle

A new company that is set up by the private sector parties to solely focus on delivering the PPP asset and service. It will be this SPV that enters into the PPP contract with the government entity.

Unsolicited Proposal

This is a proposal for a PPP project that is submitted by the private sector without having received a formal request from the public sector.

Value for Money

The procurement of a project through a PPP provides Value for Money when it delivers higher net economic benefits to society, taking into consideration the whole-life costs of the project, compared with a public sector procurement option.

Viability Gap Funding

Public financing to improve the financial viability of a project either through the provision of upfront grants to reduce the capital costs of the project or subsidies over the life of the project. The objective of this viability gap funding is to reduce the overall project costs from the private sector's perspective to improve the private sector's financial returns.

ACRONYMS

BC: Build Contract
BOO: Build-Own-Operate
BOT: Build-Operate-Transfer
CAPEX: Capital Expenditure
CBA: Cost Benefit Analysis
CFADS: Cash Flow Available for Debt Service
CPs: Condition Precedents
DBC: Design-Build Contract
DBFOM: Design-Build-Finance-Operate-Maintain
DSCR: Debt Service Cover Ratio
D&C: Design and Construction
E&S: Environmental and Social
EIA: Environmental Impact Assessment
EIRR: Economic Internal Rate of Return
ENPV: Economic Net Present Value
EPC: Engineering Procurement and Construction
GIH: Global Infrastructure Hub
ICSID: International Center for Settlement of Investment Disputes
IRR: Internal Rate of Return
KPIs: Key Performance Indicators
LLCR: Loan Life Coverage Ratio
MAGA: Material Adverse Governmental Actions
NAP: National Adaption Plan
NDCs: National Determined Contributions
NGO: Non-Governmental Organization
NPV: Net Present Value
NTP: Notice to Proceed
O&M: Operation and Maintenance
PIM: Public Investment Management
PIU: Project Implementation Unit
PLCR: Project Life Coverage Ratio
PMU: Project Management Unit
PPP: Public-Private Partnership
PSC: Public Sector Comparator
PSIP: Public Sector Investment Plan

QCBS: Quality and Cost Based Selection

RFP: Request for Proposal

RFQ: Request for Qualification

SIA: Social Impact Assessment

SPV: Special Purpose Vehicle

UN: United Nations

USP: Unsolicited Proposal

VFM: Value for Money

VGF: Viability Gap Funding

