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## **FISCAL COMMITMENTS AND CONTINGENT LIABILITIES FRAMEWORK (FCCL)**

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**Benue State Government Public-Private Partnership**

JANUARY 1, 2024

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## Acronyms

|                      |   |                                                          |
|----------------------|---|----------------------------------------------------------|
| <b>AG</b>            | - | Accountant General                                       |
| <b>AO</b>            | - | Accounting Officer                                       |
| <b>BENIPA</b>        | - | Benue State Investment Promotion Agency                  |
| <b>BPC</b>           | - | Benue Planning Commission                                |
| <b>BSIMP</b>         | - | Benue State Infrastructure Master Plan                   |
| <b>BSMOF</b>         | - | Benue State Ministry of Finance                          |
| <b>BSPPA</b>         | - | Benue State Public Procurement Authority                 |
| <b>BSPPL</b>         | - | Benue State Public Procurement Law                       |
| <b>CA</b>            | - | Contracting Authorities                                  |
| <b>CL</b>            | - | Contingent Liabilities                                   |
| <b>DMD</b>           | - | Debt Management Department                               |
| <b>DML</b>           | - | Debt Management Law                                      |
| <b>ExCo</b>          | - | Executive Council                                        |
| <b>FBC</b>           | - | Full Business Case                                       |
| <b>FC</b>            | - | Fiscal Commitments                                       |
| <b>FCCL</b>          | - | Fiscal Commitments and Contingent Liabilities            |
| <b>FCCL Register</b> | - | Fiscal Commitments and Contingent Liabilities Register   |
| <b>FDMO</b>          | - | Federal Debt Management Office                           |
| <b>FRC</b>           | - | Fiscal Responsibility Commission                         |
| <b>FRL</b>           | - | Fiscal Responsibility Law (FRL) 2016                     |
| <b>IFI</b>           | - | International Financial Institutions                     |
| <b>IPSAS</b>         | - | International Public Sector Accounting Standards         |
| <b>LTFP</b>          | - | Long-Term Fiscal Planning                                |
| <b>MAGA</b>          | - | Material Adverse Government Actions                      |
| <b>MDA</b>           | - | Ministry, Department and Agencies                        |
| <b>MTEF</b>          | - | Medium-Term Expenditure Framework                        |
| <b>OBC</b>           | - | Outline Business Case                                    |
| <b>PDT</b>           | - | Project Delivery Team                                    |
| <b>PFF</b>           | - | Project Facilitation Fund                                |
| <b>PFM</b>           | - | Public Financial Management                              |
| <b>PFML</b>          | - | Benue State Public Finances (Control and Management) Law |
| <b>PFRAM</b>         | - | PPP Fiscal Risk Assessment Model 2.0                     |
| <b>PERM</b>          | - | Project Fiscal Risk Matrix                               |
| <b>PFRR</b>          | - | Project Fiscal Risk Register                             |
| <b>PFS</b>           | - | Pre-Feasibility Study                                    |
| <b>PIM</b>           | - | Public Investment Management                             |
| <b>PO</b>            | - | Project Officer                                          |
| <b>PPIAF</b>         | - | Public-Private Infrastructure Advisory Facility          |
| <b>PPP</b>           | - | Public Private Partnership                               |
| <b>PPP Manual</b>    | - | Benue State Public - Private Partnership Manual, 2020    |
| <b>UKNAIF</b>        | - | United Kingdom Nigeria Infrastructure Advisory Facility  |
| <b>VfM</b>           | - | Value for Money                                          |

# 1. Introduction

## 1.1. Purpose of Developing an FCCL Framework

The Benue State Government recognises the significance of Public-Private Partnerships (PPPs) in enhancing the quality, cost-effectiveness, and timely provision of public infrastructure. With a growing need for infrastructure development, PPPs present an opportunity to bridge the infrastructure gap and leverage private sector expertise and investment.

The need for robust Fiscal Commitments & Contingent Liabilities (FCCL) guidelines is rooted in the BENIPA Law 2024, under Section 23. The guidelines primarily focus on managing long-term fiscal costs in PPPs, including direct and contingent liabilities that extend throughout a project's lifespan. Benue State has expressed its desire to develop a robust PPP pipeline covering a wide spectrum of sustainable and transformative infrastructure, such as infrastructure ventures, toll road projects, and healthcare facilities, where managing fiscal costs and contingent liabilities is crucial for sustainable implementation. Given the evolving PPP market in Nigeria, it is essential to establish FCCL guidelines that ensure the basic management of fiscal commitments without hindering the development of the PPP market. By doing so, Benue State can optimise the advantages of private sector participation while maintaining financial sustainability and achieving long-term infrastructure development goals.

The purpose of these guidelines is therefore to propose an operational framework for managing fiscal obligations arising from PPPs in the state, with a four-pronged process, namely:

### i. Analysis

- Identifying and quantifying fiscal commitments.
- Methodological guidance in place to quantify the fiscal impact.
- Tools are in place to assess fiscal impact.

### ii. Control

- Assessing fiscal affordability as input to approval.
- VfM is considered to warrant fiscal commitments.
- PPP portfolio is well within the limit of fiscal affordability as a percentage of GDP.

### iii. Budget

- Ensuring funding is available for fiscal commitments.
- Mechanisms are in place to ensure funding is available for contingent liabilities.

### iv. Report;

- Fiscal commitments are adequately accounted for and documented in a consolidated manner
- Periodic reporting is made under Fiscal Risk Statement (FRS), Debt Sustainability Analysis (DSA), bi-annual debt bulletins and Medium-Term Budgetary Frameworks (MTBF).

Furthermore, these guidelines also aim to provide consistent identification and assessment of PPP FCCLs at four key transaction points, namely:

- At the time of feasibility
- Prior to tender launch– submission of the Project Proposal
- Prior to signing the PPP Agreement and

- During the implementation phase.

## 1.2.Scope of the FCCL Framework

The FCCL guidelines anchor three key components, which are interlinked and mutually reinforcing:

- Defining roles and responsibilities:** These guidelines establish clear roles and responsibilities for managing fiscal costs throughout the project cycle. This includes identifying key stakeholders such as the Contracting Authority (CA), the Benue State Investment Promotion Agency (BENIPA), the Benue Planning Commission, and the Ministry of Finance to ensure effective coordination.
- Incorporating fiscal cost assessment as a key approving criterion:** Fiscal cost assessment and approval have been integrated into the PPP development and approval process as outlined in the BENIPA Law and the PPP Manual. This ensures that the fiscal implications of a PPP are thoroughly presented to and reviewed by relevant approving bodies such as the BENIPA Board and the State Executive Council before entering a contract.
- Integrating risk management as an ongoing exercise:** Fiscal costs are adequately managed during both the preparation and implementation stages of PPP projects. This involves monitoring fiscal costs at project and portfolio levels and ensuring proper financial management, transparency, and fiscal sustainability are achieved throughout the lifespan of PPP projects.

## 1.3.Applicability of the Framework

The FCCL guidelines predominantly focus on delineating how the Ministry of Finance undertakes the responsibility of evaluating and managing the impact of PPP projects on the state's fiscal resources. While these guidelines encompass various facets of PPP project development and execution, their primary emphasis lies in the assessment and fiscal management of these initiatives.

The FCCL Framework will be mandatory for all PPP projects submitted for consideration and approval by the BENIPA Board.

These guidelines also note that the scrutiny of a project's fiscal affordability and its commitment to delivering value for money shall be an ongoing, perpetual endeavour by RM. This ongoing evaluation involves regular checkpoints and assessments to ensure the project sustains fiscal soundness throughout its lifecycle. The framework highlighted in the FCCL guidelines empowers stakeholders to proactively identify and address financial challenges, thereby averting potential fiscal consequences and sustaining the project's commercial viability.

The FCCL guidelines shall remain a live document, such that future provisions may be phased in the next versions of the FCCL guidelines as the PPP program expands or when the state adopts new amendments to the BENIPA Law. The FCCL guidelines shall also remain applicable for both qualified and unqualified projects.

## 2. FCCL Guidelines

### 2.1 Overview of PPP Fiscal Liabilities and Risks

#### 2.1.1. Overview of Fiscal Commitments

PPPs offer a dual advantage of alternative financing sources and potential efficiency gains for infrastructure development. By engaging private sector investment, the burden on public funding can be spread over an extended period, allowing for accelerated expansion of infrastructure services within

existing fiscal constraints. Furthermore, the involvement of the private sector introduces efficiency gains by bundling financing, design and construction, operation and maintenance responsibilities in one contract.

### 2.1.2. Government's Contribution and Fiscal Commitments

The Benue State Government's contribution to PPP partnerships under viability gap funding (VGF), either through a combination of grants, equity commitments, debt contributions etc. or through guarantees will result in direct or indirect fiscal obligations. These commitments serve the following two broad purposes:

- i. Firstly, the Benue State Government may provide payments for economically viable projects that are not financially sustainable through user charges alone. This financial support enables the private party to earn a reasonable return on investment and encourage its participation.
- ii. Secondly, the Benue State Government's involvement in PPPs can become crucial to achieving an appropriate risk allocation. Allocating project risks to the party best equipped to manage them efficiently is a key advantage of PPPs over traditional Benue State Government procurement. The Benue State Government may bear or share certain project risks to balance risk allocation and financial viability. This can include guaranteeing a minimum level of traffic for a toll road PPP or providing credit-enhancing guarantees to mitigate overall project risks.

Through commitments identified above, the fiscal commitments by the Benue State Government in PPPs can result in both direct and contingent liabilities, as follows:

- iii. **Direct liabilities.** Direct liabilities are known payment requirements, such as upfront capital or regular payments over the contract's duration. These obligations are explicit and can be planned and budgeted accordingly. They are also relatively simple to calculate, assess and budget and can be forecasted through an updated financial model.
- iv. **Contingent liabilities.** Contingent liabilities arise from uncertain future events or circumstances. They can involve payment obligations that may emerge with uncertain timing and value. Managing these contingent liabilities is difficult and must be accounted for to ensure fiscal prudence and transparency in PPP projects. It is important to proactively assess and monitor such liabilities to mitigate potential fiscal risks for the Benue State Government in the long run.

### 2.1.3. Managing Fiscal Commitment Challenges

Effectively managing fiscal commitments under PPPs poses several challenges. Most of these commitments are long-term and extend beyond the typical budgeting and planning horizon. Furthermore, the uncertainties associated with contingent liabilities can expose the Benue State Government to fiscal risks, potentially creating budgetary uncertainties and impacting public debt sustainability. Timely and reliable honouring of government commitments is crucial to maintaining project outcomes through appropriate risk sharing in PPP projects.

Even though direct liabilities are often considered more predictable than contingent liabilities, there can also be some uncertainty with respect to certain components. For example, the project agreement of a toll road project may include a service payment defined as an annual payment to be made by the government to the concessionaire based on the availability indicators set out in the agreement. This service payment can change due to a change in several factors - inflation, exchange rate, local interest rate, change of scope, increase of road size, and other components – which may lead to a change in the



amount and/or timing of payments. Hence, direct liabilities can also carry a significant amount of uncertainty.

Overall, the various types of fiscal commitments under both direct and contingent liabilities are outlined in Table 1 below.

**Table1. Types of Fiscal Commitments in PPP Projects**

| Fiscal commitment                                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Direct liabilities</b>                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Upfront</b>                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Up-front viability payment</b>                | The government provides an up-front capital contribution to the PPP contractor (which may be phased over construction or against equity investments, but only over the initial years—that is, the construction phase—of the project lifetime).                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Associated works</b>                          | The government undertakes works that will contribute to the project, such as feeder roads (for a toll road) dredging (for a port) or purely an upfront land acquisition cost. This type of support is typically one-time and does not give rise to an ongoing commitment.                                                                                                                                                                                                                                                                                                                                              |
| <b>Ongoing</b>                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Annuity or availability payments</b>          | The government provides a fixed, ongoing subsidy, paid (typically quarterly) over the lifetime of the project, and often not starting until the construction phase is complete. This payment may be conditional on the availability of the service or asset at a contractually specified quality. The value of the payments is usually a key financial bid criterion in the tender process to select the private contractor.                                                                                                                                                                                           |
| <b>Shadow tolls</b>                              | The government provides a subsidy per unit or user of a service—for example, per kilometre driven on a toll road. The unit value of such a subsidy would typically be the financial bid criterion.                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Contingent liabilities</b>                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>“Guarantees” on Particular risk variables</b> | <p>The government compensates the private party for loss in revenue should a particular risk variable deviate from a contractually specified level. The associated risk is thereby shared between the government and the private party. For example, this could include guarantees on the following:</p> <ul style="list-style-type: none"> <li>▪ Demand remaining above a specified level or within a specified range</li> <li>▪ Exchange rates remaining within a specified range</li> <li>▪ Tariffs are allowed to follow a specified formula (where tariffs are set or approved by a government entity)</li> </ul> |
| <b>Force majeure compensation clauses</b>        | The government compensates the private party for damage or loss due to certain specified force majeure events. These are typically limited to those events, for which, insurance is not commercially available, which may include certain natural disasters or pandemic-like events.                                                                                                                                                                                                                                                                                                                                   |
| <b>Termination payment commitments</b>           | The government pays an agreed amount should the contract be terminated due to default either by the private party or by the government on their obligations under the contract, and to take control of the project assets. Typically, the defined payment is lower in case of private party default.                                                                                                                                                                                                                                                                                                                   |

|                          |                                                                                                                                                                                               |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Credit guarantees</b> | The government guarantees repayment of some, or all of the debt taken on by the project company if the project company itself defaults on the debt, regardless of the reason for the default. |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### 2.1.4. Other Fiscal Risks

Fiscal risks are factors that cause fiscal outcomes to deviate from expectations or forecasts. They arise from the occurrence of an uncertain event and from the realization of macroeconomic shocks, or other unpredictable variables that trigger CL obligations. Hence, CLs are by definition fiscal risks. Direct liabilities may be subject to fiscal risks when they may change because of uncertain parameters. Within the context of PPP agreements, other sources of fiscal risks than those embedded in direct or contingent liabilities merit attention.

Other sources of fiscal risks are those channelled through provisions – controlled by the government – of the PPP agreement. For example, an extension of the project scope – allowed in the PPP agreement and subject to the government’s consent – modifies the costs of the project to the government. Other sources of fiscal risk are outside the scope of liabilities to be paid by the government to the private partners. For instance, a reduction of user-based revenues used by the government to fund a project. This reduction does not affect the government’s liabilities to the concessionaire (that may be fixed and independent of user-revenues performance) but it does have a fiscal impact.

Uncertainty, or more precisely, unpredictable outcomes is what will make the estimation and management of FCs more challenging.

**Table 2: Examples of FCCL in PPP**

| Type of Project               | Fiscal commitment                                                                                                                                             | Contingent liabilities                                                                                                                                                                    |                                                                                                                                                                                    |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               |                                                                                                                                                               | Payment and Termination                                                                                                                                                                   | Other fiscal risks                                                                                                                                                                 |
| Toll road                     | <ul style="list-style-type: none"> <li>Upfront capital subsidy</li> <li>Service payment adjusted by macroeconomic parameters and contingent events</li> </ul> | <ul style="list-style-type: none"> <li>Revenue or traffic guarantee</li> <li>Termination payment in case of concessionaire or contracting authority default, or force majeure.</li> </ul> | <ul style="list-style-type: none"> <li>Change of scope that modifies the service payment.</li> <li>Compensation for imposed decrease in toll rates due to social unrest</li> </ul> |
| Roads Annuity Program         | <ul style="list-style-type: none"> <li>Availability payment adjusted by macroeconomic parameters and contingent events</li> </ul>                             | <ul style="list-style-type: none"> <li>Termination payment in case of concessionaire or contracting authority default, or force majeure.</li> </ul>                                       | <ul style="list-style-type: none"> <li>Disputes on land acquisition or resettlement</li> <li>Change of scope or governance</li> </ul>                                              |
| Hydroelectric Dam Power Plant | <ul style="list-style-type: none"> <li>Viability Gap Funding</li> </ul>                                                                                       | <ul style="list-style-type: none"> <li>Take or pay commitment from public utility</li> <li>Termination payment</li> </ul>                                                                 | <ul style="list-style-type: none"> <li>Change in hydrological conditions</li> <li>Renegotiation</li> </ul>                                                                         |
| Students accommodation        | <ul style="list-style-type: none"> <li>Availability payments</li> </ul>                                                                                       | <ul style="list-style-type: none"> <li>Guarantee on occupation</li> <li>Termination payment</li> </ul>                                                                                    | <ul style="list-style-type: none"> <li>Change in university governance</li> </ul>                                                                                                  |

Overall, it is important to note that Government commitments to PPPs are materially different to the Government's public debt and require a different management approach. When a Government borrows, it uses the borrowed funds and is obliged to repay the debt regardless of how well the borrowed funds are used. Government liabilities to PPPs are non/limited recourse, structured as performance-based payments for services delivered and/or assets/infrastructure developed/made available for use.

## 2.2. FCCL Management

### 2.2.1. Structure of FCCL Management

Managing and controlling liabilities occurs in all phases of PPP development, approval, and implementation.

At the project development stage, from project identification up to contract execution, the assessment and required approvals of the project FCCL are carried out by:

- Initial assessment during the project preparation stage, through feasibility studies including project risks analysis and finance structuring
- Approval of initially assessed FCCL by the required institutions as described in the following chapter
- Updated assessment during procurement (i.e. prior to PPP agreement signature) taking into account variance based on the CA's assessment and bids received from private partners.
- Checking accurate representation of FCCL in the final version of the project agreement

Section 3.2 provides technical guidance on FCCL management during the project development stage.

During the project implementation stage, FCCL is monitored and recorded through annual budget documents, which need to provide systematic disclosure of key fiscal risks and indications of potential impacts. Section 3.1 provides technical guidance on FCCL monitoring and reporting.

### 2.2.2. Institutional Framework for FCCL Management

While the primary FCCL oversight is the role assigned to the FRC, the general governance and institutional framework<sup>1</sup>, including the specific functions that need to be undertaken to manage direct and contingent liabilities during the PPP project lifecycle, is shared as follows:

**Table 3: Examples of FCCL in PPP**

| Function  | Objectives                                                                                                                                                                                                         | Role/ Responsibility                                                                                                                              |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Preparing | To develop a project design that will be bankable and ensure that the risks the government will bear are consistent with good risk allocation principles, borne at the lowest cost and with minimal fiscal impact. | Contracting Authorities / BENIPA:<br>Project feasibility analysis and implementation plans.                                                       |
| Analysing | To inform decision-making when the project is structured and approved, and provide a basis for monitoring and budgeting for liabilities.                                                                           | Contracting Authorities / BENIPA / Project Delivery Team <sup>2</sup> (PDT)<br>Fiscal risk assessments and other tools for analysing liabilities. |

<sup>1</sup> This is subject to discussion with Benue State Government stakeholders.

<sup>2</sup> As may be defined in the PPP Manual comprises the MDA's PO and AO, Legal Adviser and other key members.

|                      |                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approving            | To ensure the use of government resources (which take the form of liabilities) are: focused on policy priorities; represent value for money; and are consistent with good fiscal management. | <p>BENIPA Board / ExCo</p> <p>Centralized approval to ensure that PPPs are focused on the government's policy priorities, represents value for money, and are consistent with good fiscal management.</p> <p><b>Benue Planning Commission (BPC), DMD, MoF</b> Allocated the overall responsibility of approving the FCs and contingent liabilities before submission to the PPP Committee for approval.</p> |
| Accepting            | To clarify the government's commitment to its liabilities (i.e. financial obligations), and to ensure the executed contract is consistent with earlier analysis and approval                 | <p>Contracting Authorities, BENIPA, MoF, MoJ:</p> <p>Involves the government executing formal instruments such as project agreements, issuing letters of support or performance undertakings to guarantee that they will honour its obligations and commitments.</p>                                                                                                                                        |
| Monitoring           | To provide information needed to disclose, act on emerging issues and, if necessary, budget for liabilities                                                                                  | <p>Contracting Authorities, BPC, DMD BENIPA:</p> <p>To help government track its exposure to fiscal risks from year to year, and improve its ability to take action to reduce the cost and/or likelihood of an event triggering a payment.</p>                                                                                                                                                              |
| Budgeting and paying | To ensure resources are available to make payments promptly when required, improving credibility and clarity as to how costs of liabilities will be borne, and mitigating the fiscal impact. | <p>Contracting Authorities, BPC, MoF:</p> <p>Establish a well-defined system for budgeting and paying for liabilities will ensure the government has the resources available to meet its obligations and mitigate the fiscal or budgetary impact of contingent liabilities.</p>                                                                                                                             |
| Disclosing           | To improve accountability for decision-makers, and increase the transparency of the government's commitments to third parties (such as credit agencies and lenders).                         | <p>FRC, DMD, BENIPA, P&amp;BC:</p> <p>Reporting on exposure to liabilities through the budget and government accounts to increase transparency and improve the accuracy and completeness of information available to external parties.</p>                                                                                                                                                                  |
| Mitigating           | To help reduce the cost to the government of bearing contingent liabilities by reducing the likelihood or cost of the occurrence of those liabilities.                                       | <p>Contracting Authorities, MoF, DMD, BENIPA, BPC, FRC:</p> <p>Continuous monitoring of exposure to contingent liabilities from PPP projects, and actively managing that exposure where possible, by identifying and taking action on emerging issues.</p>                                                                                                                                                  |

Adequate identification and assessment of FCs and risks during the project development stage will allow the government to be well-informed when it makes decisions regarding the financial structure, risk allocation, and approval of the project.

### 3. FCCL Technical Guidance

#### 3.1. Overview

The purpose of the technical guidance is to

- Develop an analytical process to identify, assess and monitor FCCL during the project life cycle of PPP projects
- Detail a methodology for implementing the tools involved in the management of FCCL including pre-formatted tools for the identification and quantification of FCCL.

#### 3.2. FCCL Management During Project Development Stage

The project development stage covers all the steps taken to design, prepare and procure a PPP project. The FCCL framework includes: (1) the identification and assessment of FCs and risks, and (2) the assessment of affordability. Both activities will help authorities to make well-informed decisions about the project.

This section sets out:

- The identification and evaluation of PPP fiscal risks through the PFRM and Project Fiscal Risk Register (PFRR) (section 3.2.1);
- The calculation of FCCL through the FCCL Register and Affordability (section 3.2.4);

##### 3.2.1. Identification and Evaluation of PPP Fiscal Risks Through the PFRM

Risk allocation is a centrepiece of structuring a PPP agreement. The basic principle is that each risk should be allocated to the party best able to manage it. Risks may be allocated to one party or shared in a specified way.

During the preparation of a PPP project, the assessment and allocation of project risks should be completed. The CA (or the Transaction Advisors appointed for the project by the CA or BENIPA as the case may be) should create a risk matrix and a risk register, documenting the evaluation of the likelihood and impact of each risk at the OBC stage. These should be periodically assessed by the CA.

##### 3.2.2. Rationale

Assessing the fiscal implications of a PPP agreement involves the identification and allocation of risks of the project, definition of payment mechanism, and determination of the other financial obligations and rights of parties. In practice, the base information needed shall be found in the risk analysis and risk matrix within the relevant feasibility studies. For active projects, these would be determined based on a review of project agreements, letters of support, guarantee instruments, and other relevant project documentation.

PPP project agreements, letters of support and other forms of explicit government support provide the baseline information on FCCL arising from PPP projects. They contain the core financial provisions, namely: the payment mechanism and allowed adjustments to availability payments; tariff-based payments; guarantees and trigger conditions; and termination payments.

However, the project documentation may not explicitly contain all risks and therefore their fiscal impact not fully understood. For instance, a government may take revenue risk and pay to the concessionaire an availability payment. In this case, the contract provides the terms of the availability payment yet

does not set out the effects of, for instance, real demand falling below expectations. Hence, the risk matrix complements the contract agreement in identifying FCs and fiscal risks.

In addition, fiscal risks may also result from risks not identified or not clearly allocated in the contract. The most obvious is the risk that the private partner does not have the managerial capacity to implement the project or face the stipulated risks, culminating in its bankruptcy and potentially the failure of the project. Project finance solutions, with limited or no recourse to the assets of the borrower, require a careful assessment of the capital and private-sector guarantees needed for sound project execution to spread the risk among multiple investors, insurers, and diverse financial entities.

Changes to the project and the contract, especially if not triggered by the private partner, can generate a fiscal risk. When negotiating and agreeing to such changes, the private partner always has greater leverage than the CA as the project incumbent. The two most common sources for such changes are as follows:

- Fiscal costs related to changes in scope or policy changes introduced by the government during the term of the contract. Typical examples of this are: (1) transferring some cost overruns to the government when the government asks for changes in project design, or (2) renegotiating the contract when the government decides to change the user-fee structure in response to lower-than-expected demand. It is key to understand the FCCL impact of such government-initiated changes on PPPs and conduct the cost-benefit analysis of initiating such changes in this context.
- Fiscal costs triggered by exogenous changes resulting, for example, from technological improvements, demographic movements, or changes in consumers' preferences. The government must manage the consequences of exogenous changes continuously and proactively to mitigate the impact on projects and provide solutions to challenges.

The Project Fiscal Risk Matrix objective is to support the identification, assessment, and mitigation of common fiscal risks from each specific PPP project. The PFRM, which is prepared on a project-by-project basis, is a tool to formalise the evaluator's assessment of the various fiscal risks of a project, including those specified and unspecified in the contract.

### **3.2.3. Approach to PFRM**

#### **a. Identification of fiscal risks (and allocation)**

The identification of fiscal risks focuses on those risks that may have significant fiscal implications.

In doing so, it looks into both contractual risks and other risks not allocated directly by contract (for example, risks arising from the governance structure, legal framework, or government institutional capacity). It does not assess all of the potential risks that can arise during the project cycle

Based on the World Bank's PPP Fiscal Risk Assessment Model (PFRAM 2.0) instrument, 11 major categories of risks and 40 subcategories are to be captured in the PFRM. The main risks categories presented in Table 3-2, 3-3 respectively, as well as the subcategories included in PFRAM 2.0 presented in 4 presents a detailed illustration of risks and sub-risks. Appendix B provides a detailed questionnaire as to how these risks should be assessed by a CA (or Transaction Advisor appointed for the project).

**Table 4: Risk Categories**

| Main Risk Category                           | Number of Risks Subcategories |
|----------------------------------------------|-------------------------------|
| 1 Governance Risks                           | 3 detailed risks              |
| 2 Construction Risks                         | 11 detailed risks             |
| 3 Demand Risks                               | 7 detailed risks              |
| 4 Operation & Performance Risks              | 6 detailed risks              |
| 5 Financial Risks                            | 4 detailed risks              |
| 6 Force Majeure Risks                        | No Subcategories              |
| 7 Material Adverse Government Actions (MAGA) | No subcategories              |
| 8 Change in Law                              | No Subcategories              |
| 9 Rebalancing of Financial Equilibrium       | 3 detailed risks              |
| 10 Renegotiation Risks                       | No Subcategories              |
| 11 Contract Termination Risks                | 2 detailed risks              |

Source: PFRAM 2.0 User Manual

At the early stage of the project designs, and when preparing the draft contract, it is recommended that CAs:

- Review the major risk categories
- Identify the important fiscal risks from the project that should be covered in the PPP agreement or the legal framework
- Starts establishing the PFRR illustrated in Table .

**Table 5: Project Fiscal Risk Register**

| Risk Identification |            | Allocation          | Likelihood                | Fiscal Impact |                    | Rating | Mitigation         |
|---------------------|------------|---------------------|---------------------------|---------------|--------------------|--------|--------------------|
| Category            | Event type | Govt/Private/Shared | Probability of occurrence | Base Costs    | Cost of occurrence |        | Measures and costs |
| Governance          | Risk A     |                     |                           |               |                    |        |                    |
|                     | Risk B     |                     |                           |               |                    |        |                    |
| Construction        | Risk A     |                     |                           |               |                    |        |                    |
|                     | Risk B     |                     |                           |               |                    |        |                    |
|                     | Risk C     |                     |                           |               |                    |        |                    |
| Demand              | Risk A     |                     |                           |               |                    |        |                    |
| Operation           | Risk A     |                     |                           |               |                    |        |                    |
|                     | Risk B     |                     |                           |               |                    |        |                    |

## b. Risk Allocation

As stated above (Section 3.2.1), risk allocation is at the heart of PPP structuring. Risks may be allocated to either the Government or the private partner or shared. The more the risk is borne by the private partner, the less its occurrence will impact the Government purse. In its project risk assessment, the

evaluator (CA or Transaction Advisor) should primarily focus on those borne by the Government or shared.

### c. Assessment of Likelihood of Risks

After identifying the relevant risks for a PPP project, the evaluator shall assess the likelihood of such risks materializing in the future.

Initially, it is sufficient to identify whether the likelihood is low, medium, or high. Several factors can help determine the likelihood. For example, the logic illustrated in In case the risk rating is high, and it's further assessment is a priority following the project heat map (Table 8), the probability of occurrence may need to be determined for the purpose of contingent liabilities monitoring (Section 3.2.2).

Error! Reference source not found. **Could be Used as a Reference.**

|                   | Low                                                                                                                                        | Medium                                                                                               | High                                                                                                            |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Likelihood</b> | <ul style="list-style-type: none"> <li>• Very unlikely but not negligible</li> <li>• Would require highly unusual circumstances</li> </ul> | <ul style="list-style-type: none"> <li>• Likely and possible</li> <li>• Not unprecedented</li> </ul> | <ul style="list-style-type: none"> <li>• Very likely, almost certain</li> <li>• Extensive precedents</li> </ul> |

Source: PFRAM 2.0 User Manual

### d. Estimation of Fiscal Impact of Risks

The most critical output when looking at FCCL is the cost of risk occurrence. It is also the most difficult to predict as most fiscal risks could have varying impacts depending on how they materialize.

Firstly, the Project Officer (PO) / Accounting Officer (AO)<sup>3</sup> should evaluate the potential fiscal impact of a particular risk holistically from a qualitative perspective, providing as much information as possible to support the assessment of low, medium, or high.

For instance, this qualitative assessment could be made by comparison with the state GDP or with the project costs. The fiscal implications of governance risk materializing would be reflected also in terms of the government's loss of reputation, efficiency, availability, and transparency. Table 7 provides an example of a fiscal impact scale rating.

**Table 7: Fiscal Impact Assessment of Identified Risks**

| Scale         | Value                                  | Fiscal Impact                                                                                                                                                                                    |
|---------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Low</b>    | < 0.1% of GDP or<br>< 5% of CAPEX      | Impact on government deficit and debt lower than X% of GDP (accumulated construction cost of the asset). Minimal damage to the government's reputation, service availability, and operation.     |
| <b>Medium</b> | 0.1%-0.2% of GDP<br>or 5%-25% of CAPEX | Impact on government deficit and debt between X% and Y% of GDP (accumulated construction cost of the asset). Limited damage to the government's reputation, service availability, and operation. |
| <b>High</b>   | > 0.2% of GDP or<br>> 25% of CAPEX     | Impact on government deficit and debt above Y% of GDP (accumulated construction cost of the asset). Significant damage to the government's reputation, service availability, and operation.      |

Source: Based on PFRAM 2.0 User Manual

<sup>3</sup> As per the PPP Manual, the project planning stage initiated by the Benue State Government begins with the appointment of a Project Delivery Team (PDT) comprising experienced public officials to ensure effective management of the PPP process and contracts. The PO manages the PPP project preparation process. The AO is the officer in the CA responsible for financial oversight of the process, reporting on the financial viability of the PPP project and managing any capital flows to/from the government.



As per the likelihood, in case the severity of the risk is rated as high or critical in the project heat map (Table 83), the fiscal impact would need to be further determined for monitoring contingent liabilities (section 3.2.3).

#### e. Determination of Risk Rating

The qualitative likelihood and fiscal impact are put together to estimate the overall risk rating (typically called the severity of the risk). This is done by combining the likelihood and fiscal impact, as shown in Table 84. Risks assessed as having a high likelihood and a high fiscal impact would be regarded as “critical”. A “high” risk rating would be the result of a high likelihood and a medium fiscal impact, as well as a medium likelihood and a high fiscal impact.

**Table 8: Example of Heat Map Based on Risk Rating**

| Risk Rating = Likelihood x Fiscal Impact |        |            |        |          |
|------------------------------------------|--------|------------|--------|----------|
| Fiscal Impact                            | High   | Medium     | High   | Critical |
|                                          | Medium | Low        | Medium | High     |
|                                          | Low    | Irrelevant | Low    | Medium   |
|                                          |        | LOW        | MEDIUM | HIGH     |
|                                          |        | Likelihood |        |          |

Source: PFRAM 2.0 User Manual

#### f. Identification of Mitigation Strategy

Possible mitigation measures vary with the risks. 4 presents a detailed illustration of risks, sub-risks and typical mitigation measures for each of the subcategories. These suggestions are not meant to be exhaustive; they represent typical mitigation measures based on international good practices.

For risks, the severity of which are rated high or critical, mitigation measures should be considered, and associated costs assessed.

#### g. Determination of Priority Actions

Based on the risk rating and the mitigation measures, an assessment of the priority of the required actions is to be undertaken as demonstrated in Table 9. The more severe risks - those with a high rating - should be addressed first. Risks rated as critical, paired with no mitigation measures in place, would result in the need to implement a “critical” priority action; the priority would be considered a “high priority” if mitigation measures exist. Addressing the less important risks, even if they are an easy fix, does not improve the overall risk profile of the project and does not reduce the risk for the government

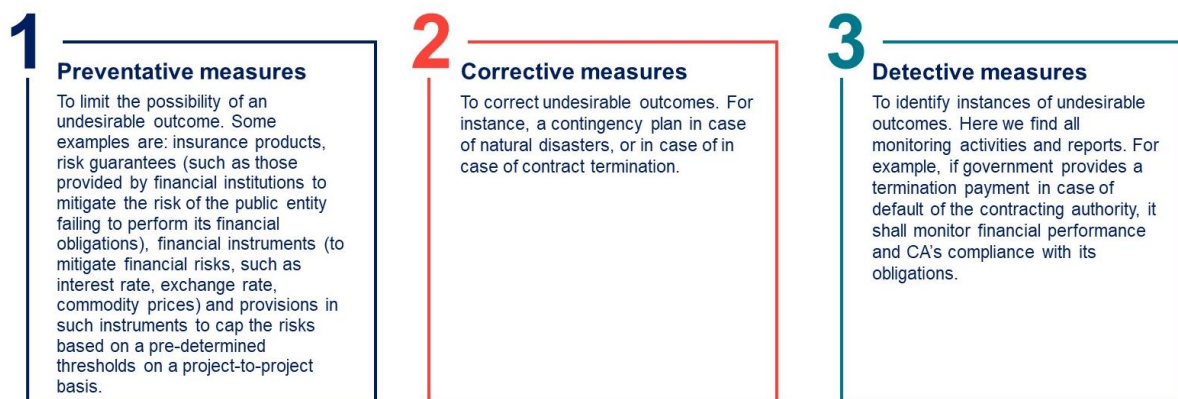
**Table 9: Prioritisation of Risk Mitigation Measures**

| Priority action = Risk rating x Mitigation measure |     |             |                 |                 |                 |               |
|----------------------------------------------------|-----|-------------|-----------------|-----------------|-----------------|---------------|
| Mitigation measure                                 | NO  | No action   | Medium priority | High priority   | High Priority   | Critical      |
|                                                    | YES | No action   | Low Priority    | Medium priority | Medium priority | High priority |
|                                                    |     | Irrelevant  | Low             | Medium          | High            | Critical      |
|                                                    |     | Risk Rating |                 |                 |                 |               |

Source: PFRAM 2.0 User Manual

Depending on the stage of the project cycle, risks identified as areas for priority actions can be addressed as follows: (1) by changing the design of the project to avoid the risk—this is only relevant before the

PPP is contracted; (2) by introducing additional mitigation measures; or (3) by creating fiscal space to absorb the potential fiscal cost if the risk materializes.



With respect to mitigation, the following are some suggested types of mitigation measures by the Government:

- *Preventive measures*: To limit the possibility of an undesirable outcome. Some examples are: insurance products, risk guarantees (such as those provided by financial institutions to mitigate the risk of the public entity failing to perform its financial obligations), financial instruments (to mitigate financial risks, such as interest rate, exchange rate, commodity prices) and provisions in such instruments to cap the risks based on a pre-determined thresholds on a project-to-project basis.
- *Corrective measures*: To correct undesirable outcomes. For instance, a contingency plan in case of natural disasters, or in case of contract termination.
- *Detective measures*: To identify instances of undesirable outcomes. Here we find all monitoring activities and reports. For example, if the government provides a termination payment in case of default of the contracting authority, it shall monitor financial performance and CA's compliance with its obligations.

For each project, the compilation of the qualitative assessment of the identified fiscal risks constitutes the PFRM which will provide a heat map for the monitoring of fiscal risks during the project life cycle.

**Table 10: Project Fiscal Risk Matrix**

| Risk identification               | Likelihood | Fiscal Impact | Risk Rating Likelihood Impact | Mitigation strategy is it in place? | Priority actions | Suggested Mitigation Strategy |
|-----------------------------------|------------|---------------|-------------------------------|-------------------------------------|------------------|-------------------------------|
| Governance Risks                  | Low        | Medium        | Low                           | No                                  | Medium Priority  |                               |
| Construction Risks                | Medium     | High          | High                          | Yes                                 | Medium Priority  |                               |
| Demand Risks                      | Medium     | Low           | Low                           | No                                  | Medium Priority  |                               |
| Operational and Performance risks | Low        | Low           | Irrelevant                    | Yes                                 | No action        |                               |
| Financial risks                   | Medium     | Medium        | Medium                        | No                                  | High Priority    |                               |
| Force Majeure                     | Low        | Low           | Irrelevant                    | Yes                                 | No action        |                               |

| Risk identification                  | Likelihood | Fiscal Impact | Risk Rating Likelihood Impact | Mitigation strategy is it in place? | Priority actions | Suggested Mitigation Strategy |
|--------------------------------------|------------|---------------|-------------------------------|-------------------------------------|------------------|-------------------------------|
| Material adverse government actions  | Medium     | Medium        | Medium                        | No                                  | High Priority    |                               |
| Change in law                        | Medium     | High          | High                          | No                                  | Critical         |                               |
| Rebalancing of financial equilibrium | High       | Medium        | High                          | Yes                                 | High Priority    |                               |
| Renegotiation                        | High       | Low           | Medium                        | Yes                                 | Medium Priority  |                               |
| Contact Termination                  | Medium     | Medium        | Medium                        | Yes                                 | Medium Priority  |                               |

Source: PFRAM 2.0 User Manual

The PFRM should be reviewed annually and each time an event changes the project risk profile, and the PFRR be filled in accordingly for all medium, critical and high-priority risks.

### 3.2.4. FCCL Register and Affordability

#### h. FCCL Register and Calculation

As discussed in section 0, FCCL comprises direct and contingent financial liabilities. The direct liabilities include upfront payment, VGF, construction or operation subsidies, and availability payments.

The universe of contingent liabilities is in essence more diverse but primarily includes:

- 1) Any guarantee, insurance or financial support provided by the CA or any other public entities to ensure either
  - a) a minimum level of revenues to the private partner: Revenue guarantee, or
  - b) the interest, fees or repayment due by the private partner under the terms of the financing products (debt, bonds, guarantees) arranged for the project financing: Debt guarantee
- 2) Any payment due to the private partner by the CA in case of termination of the PPP agreement before its terms: Termination payment. It shall be noted that Termination payment depends upon the cause of early termination, which comprises: private partner default, force majeure, contracting authority default, or termination for convenience.
- 3) Contingent liabilities arising from the occurrence of other fiscal risks as identified in the PFRR.

Based on the PFRR, the evaluator will quantify the contingent liabilities arising from the occurrence of a fiscal risk identified in the PFRM and analyzed the PFRR. This quantitative assessment shall be done in accordance with the priority actions determined on the project heat map and address the risks which have been qualified as critical or requiring high priority monitoring.

All direct and indirect liabilities shall be consolidated in the following FCCL Register (refer Table ). The FCCL Register contains the type of liability, description of adjustment factors and trigger events, and the location (which will depend on the stage of the project).

**Table 11: FCCL Register**

| Fiscal Commitment | Type of fiscal commitment/Definition                                               | Adjustment factors/Trigger events                     | Location                                                                                                      |
|-------------------|------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>Project X</b>  |                                                                                    |                                                       |                                                                                                               |
| Payment 1         | <b>Direct</b><br>Explain payment concept, periodicity, and form of calculation     | Detail adjustment factors and trigger events if apply | Specific location where this information was taken (Feasibility Study, PPP Contract, Letter of Support, etc.) |
| Payment 2         | <b>Contingent</b><br>Explain payment concept, periodicity, and form of calculation |                                                       | -                                                                                                             |
| Payment 3         | -                                                                                  | -                                                     | -                                                                                                             |

Source: CPCS

Table provides guidelines on what measures and methodologies to use for the assessment of typical FCCL.

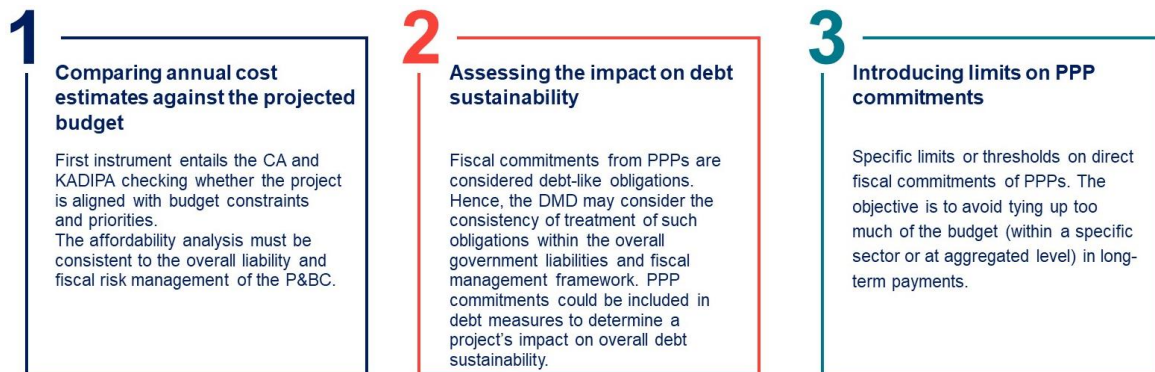
**Table 12: Methodologies for Assessment of FCCL**

| FCCL                                                                                     | Estimate                                                                                                | Function of available information                                                                                     |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Direct Liabilities                                                                       |                                                                                                         |                                                                                                                       |
| Upfront payment                                                                          | - Annual cost over life of project<br><br>- Present value of payment stream for the period of agreement | - Base Case                                                                                                           |
| Availability payment                                                                     |                                                                                                         | - Scenario analysis<br>- Qualitative analysis of likelihood of reaching trigger values<br>- Probability of occurrence |
| Availability payment   adjusted permanently by macroeconomic parameters                  |                                                                                                         |                                                                                                                       |
| Availability payment adjusted by contingent events                                       |                                                                                                         |                                                                                                                       |
| Contingent liabilities                                                                   |                                                                                                         |                                                                                                                       |
| Revenue guarantee                                                                        | - Estimated annual cost over life of project                                                            | - Scenario analysis                                                                                                   |
| Debt guarantee                                                                           |                                                                                                         | - Qualitative analysis of likelihood of reaching trigger values                                                       |
| Guarantee over annual payment by state-owned enterprise, local or subnational government | - Estimated present value of payment stream for the period of agreement                                 | - Probability of occurrence                                                                                           |
| Termination payment                                                                      | - Maximum value                                                                                         |                                                                                                                       |
| Other fiscal risks                                                                       |                                                                                                         |                                                                                                                       |

Source: CPCS

## i. Assessment and Affordability

With the estimations of fiscal costs, the government must now check if the project is affordable. This should be undertaken as part of the OBC preparation.



The three common instruments used to check affordability are:

- 1) Comparing annual cost estimates against the projected budget;
- 2) Assessing the impact on debt sustainability; and
- 3) Introducing limits on PPP commitments.

The first instrument entails the CA and BENIPA checking whether the project is aligned with budget constraints and priorities. Verifying that the FCs are affordable within the budget is the primary step. This is achieved by assessing if the commitments allow the CA to achieve their fiscal targets or surplus i.e. does the CA's annual budget allocation accommodate the cost of FCCL?

It must be noted that this step needs to be done in line with the overall PPP framework, i.e. verification that the FC estimations allow for positive social benefits (pass the cost-benefit analysis). Also, the affordability analysis must be consistent with the overall liability and fiscal risk management of the P&BC.

FCs from PPPs are considered debt-like obligations. Hence, the DMD may consider the consistency of treatment of such obligations within the overall government liabilities and fiscal management framework. PPP commitments could be included in debt measures to determine a project's impact on overall debt sustainability.

Some governments adopt specific limits or thresholds on direct FCs of PPPs. The objective is to avoid tying up too much of the budget (within a specific sector or at the aggregated level) in long-term payments. At this point, however, such limits are usually not needed in the early stages of PPP programs, such as the case of BENUE STATE GOVERNMENT. This could be developed later as the magnitude and potential of the program becomes clear.

Table 13 presents the affordability indicators proposed in this framework.

**Table 13: Affordability Indicators**

| FC                  | Cost                                                                                                                                                  | Indicator of fiscal affordability<br>(Including projections over PPP contract length-beyond medium-term horizon)                                                                                                                                                                                      |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Direct liabilities  | <ul style="list-style-type: none"> <li>- Estimated Annual payments</li> <li>- NPV</li> </ul>                                                          | <ul style="list-style-type: none"> <li>- Cost as a percentage of ministry or sector agency, and national annual revenue / deficit-surplus budget</li> <li>- Cost as a percentage of sub-national public debt</li> <li>- Cost as a percentage of GDP</li> </ul>                                        |
| Guarantees          | <ul style="list-style-type: none"> <li>- Estimated annual payment, or expected average payment</li> <li>- NPV<br/>(Base/Downside cases)</li> </ul>    | <ul style="list-style-type: none"> <li>- Cost as a percentage of ministry or sector agency, and national annual revenue / deficit-surplus budget</li> <li>- Cost as a percentage of contingency line</li> <li>- Cost as a percentage of public debt</li> <li>- Cost as a percentage of GDP</li> </ul> |
| Termination payment | <ul style="list-style-type: none"> <li>- Estimated worst-case payment or expected average payment</li> <li>- NPV</li> </ul>                           | <ul style="list-style-type: none"> <li>- Cost as percentage of national budget</li> <li>- Cost as percentage of contingency line</li> <li>- Cost as percentage of GDP</li> </ul>                                                                                                                      |
| Other fiscal risk   | <ul style="list-style-type: none"> <li>- Estimated worst-case payment or expected average payment</li> <li>- NPV<br/>(Base/Downside cases)</li> </ul> | <ul style="list-style-type: none"> <li>- Cost as percentage of ministry or sector agency, and national annual revenue / deficit-surplus budget</li> <li>- Cost as percentage of contingency line</li> <li>- Cost as percentage of GDP</li> </ul>                                                      |

Source: CPCS

### 3.1. FCCL Management During Project Implementation

#### 3.1.1. Monitoring

Managing FCs entails monitoring, reporting and budgeting of PPP projects, both at individual project level and at portfolio program level. Adequate monitoring and disclosure of FCs and risks will allow the government to prevent undesirable events from occurring, mitigate their impact, and make informed decisions during the operation phase.

This stage will require gathering project financial parameters, risks and performance, and country macroeconomic information, and any other input that may affect fiscal commitments and fiscal risks. The objective will be to ensure that updated information is reported at the right time to the relevant gatekeeping entities, in line with extant provisions of the financial and debt management regime.

Each commitment or fiscal risks must have specific information, such as financial and accounting ratios and indicators, to monitor the evolution across the full term of the contract.

Table 14 highlights what minimum information shall be collected and registered by the CAs in each PPP project:



**Table 14: Monitoring Information: FCs and Fiscal Risks**

| FC                            | Required information / Periodicity | Entity who must send information | Obligation to submit the information set at: (PPP Agreement, Letter of Support, etc.) | Follow-up of mitigation activities of Risk Register |
|-------------------------------|------------------------------------|----------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------|
| <b>Project X</b>              |                                    |                                  |                                                                                       |                                                     |
| <b>Direct Liabilities</b>     |                                    |                                  |                                                                                       |                                                     |
| Payment 1                     | -                                  | -                                | -                                                                                     | -                                                   |
| Payment 2                     | -                                  | -                                | -                                                                                     | -                                                   |
| <b>Contingent Liabilities</b> |                                    |                                  |                                                                                       |                                                     |
| Payment 1                     | -                                  | -                                | -                                                                                     | -                                                   |
| Payment 2                     | -                                  | -                                | -                                                                                     | -                                                   |
| <b>Other fiscal risks</b>     |                                    |                                  |                                                                                       |                                                     |
| Risk A                        | -                                  | -                                | -                                                                                     | -                                                   |

Source: CPCS

### 3.1.2. Reporting and Disclosing

#### 3.1.2.1. Reporting

Benue State Government needs to **account for and report** on their FCs of PPP agreements. The FRC / Ministry of Finance shall keep a centralized register of FCs of PPP transactions. Proper reporting incentivizes the government to scrutinise its financial position. Also, making reports available to other parties, such as lenders, rating agencies, PPP stakeholders, and the public, enables them to make informed opinions on the government's PPP fiscal management and performance.

For internal and external transparency of the financial effects of PPPs on the government's position, FCs shall be reported. Also, it is recommended that, given the FCs may have debt-like effects on public finances, they are subject to similar checks and limits to debt obligations.

Table shows the suggested information to be reported on direct and contingent liabilities for each PPP project by CAs. The description shall include: a description of the liability, an estimate of the value of the liability, annual cost and present value (for direct liabilities), and maximum exposure (for contingent liabilities). This reporting shall be included in medium-term budget reports and debt strategy reports.

#### 3.1.2.2. Disclosures

Specifically, the FRC shall publish information on all FCs and contingent liabilities as a section in the "Report on Public Debt, Guarantees and other Financial Liabilities", as may be required under the FRL, (and the MTEF).

For public disclosure purposes, it is recommended to disclose the stream of annual payments and net present value of all payments of direct liabilities per project. It is also recommended to publish maximum exposure for those contingent liabilities which probability or occurrence is considered low (such as for instance termination payments). For the case of guarantees, it is recommended either: (1) to disclose the stream of annual payments and net present value of all payments per project if the information used for its estimation is reliable, or (2) maximum exposure of aggregated payments.

Table shows a sample of reporting format to present direct and contingent liabilities by project.

**Table 15: Reporting Sample of FCs by Project**

| PPP project | Direct liabilities                                                   | Annual payments value for 3-year budget           |      |      | Present value of all payments     |
|-------------|----------------------------------------------------------------------|---------------------------------------------------|------|------|-----------------------------------|
|             |                                                                      | 2019                                              | 2020 | 2021 | 2022                              |
| Project 1   | - Annuity payment.<br>Indexed quarterly by inflation.                |                                                   |      |      |                                   |
| Project 2   | - Annuity payment.<br>Indexed quarterly by inflation.                |                                                   |      |      |                                   |
| PPP project | Contingent liabilities                                               | Estimated annual payments value for 3-year budget |      |      | Present Value of Maximum exposure |
|             |                                                                      | 2019                                              | 2020 | 2021 | 2022                              |
| Project 1   | - Revenue Guarantee                                                  |                                                   |      |      |                                   |
|             | - Termination payment<br>In case of default of contracting authority |                                                   |      |      |                                   |
| Project 2   | - Termination payment<br>In case of default of contracting authority |                                                   |      |      |                                   |

Source: CPCS

It must be noted that estimations of liabilities (

Table 14) and follow-up activities must be updated in an ongoing basis.

Estimates should be updated at least during the following project milestones:

- Approval of PPP project in the PPP project pipeline by the Executive Council (ExCo)
- Approval of OBC
- Approval of Full Business Case (FBC) by ExCo
- After the financial closure of the PPP project
- During construction years (they are the riskiest years) on an annual basis
- During operation (checking on the financial performance of the firm) on an annual basis

### **3.1.3. Accounting**

Fiscal responsibility is usually examined in relation to thresholds over the government's liabilities and expenditures. It must be taken into account that adequate accounting and reporting tackle the perception bias that PPPs attract immediate private financing without increasing government spending and debt. Determining how PPP commitments are to be recognised is important as it defines whether such liabilities count toward debt management limits. International public-sector accounting standards, such as International Public Sector Accounting Standards (IPSAS) 32, and international government financial reporting and statistics guidelines, such as IMF's GFSM (2014), and IMF's Guide on Public Sector Debt Statistics (2013) provide a framework for accounting and statistics of PPP transactions.

IPSAS 32 defines when PPP assets and liabilities should be recognised, assuming the government is following accrual accounting standards. Assets and liabilities appear in the government's balance sheet, if: (1) the government controls or regulates the services the operators must provide through a PPP agreement, and (2) the government control any residual interest in the asset at the end of the contract. Under this framework, the assets provided by the concessionaire are recognized, as well as its correspondent liabilities, either if the assets are funded by users-tariffs or by the government. Regarding contingent liabilities, IPSAS 19 states that the expected cost of a contingent obligation should be recognized only if: (1) it is more likely than not (50%) that the event will occur; and (2) the amount of the obligation can be measured with sufficient reliability.

Based on the understanding that BSMOF is already accustomed to IPSAS, it is recommended that this framework be used for accounting for FCCL.

## 4. Appendix A: PFRAM Risks and Mitigation Measures

PFRAM 2.0 User Manual proposes the following list of risks and associated potential mitigation measures to be considered when establishing the Project Risk Matrix:

### 4.1.1. Governance Risks

- **R1.** If the Public Investment Management (PIM) framework is not strong enough to guarantee that only priority projects are selected, a non-priority project might be implemented and absorb public resources, crowding out priority projects and leading to efficiency losses. To mitigate this risk, the public investment management framework should be reinforced.
- **R2.** If the Ministry of Finance (MOF) is not able to effectively manage fiscal risks arising from this project, the risks might be amplified, and the probability and impact of other fiscal risks may be higher than they would be with adequate experience and capacity. To mitigate this risk, the capacity in the fiscal risk management team in the MOF/Budgetary authority should be strengthened.
- **R3.** If project and contract information is not disclosed adequately, public concerns regarding the governance of the project/contract may arise, preventing users from acting as independent auditors of the project and/or exerting pressure to change the project. To mitigate this risk, the government should put in place a strong communication strategy engaging stakeholders and creating ownership of the project, together with clear and standardised disclosure procedures for project information and, ultimately, contract disclosure.

### 4.1.2. Construction

#### **R4. Risks related to land availability**

- If the land is not already available, the government might face additional fiscal costs arising from possible compensation for construction delays. To mitigate this risk, (1) a complete assessment of land needs should be undertaken prior to contract closure; (2) the land acquisition process should be prepared; and (3) buffers and flexibility clauses should be included in the contract.
- If the project might be canceled due to lack of land, the government might face costs due to compensation to the private partner and the project redesign. To mitigate this risk, the government should ensure land availability at an early stage of the project cycle.
- If the private partner has to pay for the land acquisition, the private partner might not be able to cope with the cost; the government would be confronted with the cost of project cancellation and retender, or renegotiation at higher fiscal cost. To mitigate this risk, the government should ensure land availability at an early stage of the project cycle or provide sufficient information regarding the need and value of the land to ensure that the private partner can cope with the cost.
- If the government has to pay for land acquisition, it may face additional fiscal costs arising from the acquisition and possible delays due to unavailability of land, which might lead to compensation payments for possible delays. To mitigate this risk, the government should (1) complete the assessment of land availability and cost prior to contract closure; and (2) build in buffers and flexibility clauses in procurement and contracts.

#### **R5. Risks related to relocation of people and activities**

- If people and/or activities are subject to relocation due to project implementation:
  - If the government is paying for the relocation of people and/or activities and possible project delays, it will face the cost of relocation and compensation. To mitigate this risk, the government should undertake a timely assessment of relocation needs and engage in effective stakeholder management.
  - If the private partner is paying for the relocation of people and/or activities and is unable to cope with the cost, the government will be faced with the cost of project cancellation and retender, or renegotiation at a higher fiscal cost. To mitigate this risk, the government should ensure timely assessment of relocation needs and provide sufficient information on relocation needs and costs.

#### **R6. Risks related to land decontamination**

- If the government has to pay for land decontamination and the need for decontamination arises, this will result in fiscal costs. To mitigate this risk, the government should undertake a timely assessment of the need and cost of decontamination.
- If the private partner has to pay for land decontamination and cannot cope with the cost, the government may face the cost of project cancellation and retender, or renegotiation at a higher fiscal cost. To mitigate this risk, the government should (1) ensure a timely assessment of decontamination needs; and (2) provide sufficient information on land condition.

#### **R7. Risks related to environmental and archaeological issues**

- If there is a possibility of facing environmental/archaeological issues and the government has to pay for them, the government may face costs (1) for environmental and archaeological issues; and (2) for compensation payments it might have to make to the private partner due to project delays. To mitigate this risk, the government should (1) specify environmental constraints prior to tender (including permits and licenses), and (2) develop a plan to deal with archaeological findings.
- If there is a possibility of environmental/archaeological issues and the private partner has to pay for them, the private partner might not be able to cope with the associated costs; the government may be faced with the cost of project cancellation and retender, or renegotiation at higher fiscal cost. To mitigate this risk, the government should (1) specify environmental constraints prior to tender (including permits and licenses), and (2) develop a plan to deal with archaeological findings.

#### **R8. Risks related to geological issues**

- If geological issues are possible and the government has to pay for them, it may face compensation payments. To mitigate this risk, the government should (1) ensure a timely assessment of the geological conditions and their implications for the project, and (2) develop a plan to deal with these issues.
- If there is a possibility of geological issues and the private partner must pay for them, the private partner might not be able to cope with the costs related to these issues; the government may be faced with the cost of project cancellation and retender, or renegotiation at higher fiscal cost. To mitigate this risk, the government should (1) ensure a timely assessment of the geological conditions and their implications for the project; and (2) provide sufficient information regarding geological conditions.

#### **R9. Risks related to licensing**

- If the project is subject to licensing and the government pays compensation for project delays due to delayed licensing, the government may face the costs of compensation for project delays. To mitigate this risk, the government should ensure that subnational governments are fully supportive of the project and that project deadlines are consistent with subnational regulations.

**R10. Risks related to failures/errors/omissions in project design**

- If the government can be held responsible for design failures, errors, or omissions, it may have to pay compensation for failures in designs presented to the private partner if the cost of design risks is not fully transferred to the private partner. To mitigate this risk, the tender process and the contract should ensure that the private partner takes full responsibility for the design.

**R11. Risks related to inherent defects in assets transferred to the private partner**

- If the government can be held responsible for any inherent defect in assets transferred to the private partner, it may have to pay compensation to the private partner for inherent defects and the costs of defect remediation. To mitigate this risk, the government should ensure a prior assessment of the quality of the assets to be transferred to the private partner, allowing for full pricing of identifiable defects.

**R12. Risks related to changes in project design and scope required by procuring agencies**

- If the government is responsible for compensation due to changes in design and scope required by procuring agencies, it may have to compensate the private partner for net costs due to changes in the design and/or scope. To mitigate this risk, the contract should include provisions allowing for changes in the design/scope of the project, up to a predetermined limit. In addition, the accountability framework to monitor project cost overruns should be reviewed and improved, as necessary.

**R13. Risks related to changes in input prices**

- If the government is responsible for compensation in the event of excess volatility in input prices, it may have to pay compensation for significant changes in input prices. To mitigate this risk, the volume and prices of the relevant inputs should be monitored, and sufficient funds should be allocated for expected compensation payments.
- If the private partner faces any excess volatility of input prices, the private partner may not be able to cope with significant changes; the government may be faced with the cost of project cancellation and retender, or renegotiation at a higher fiscal cost. This risk can be mitigated by renegotiating the contract to re-establish financial equilibrium.

**R14. Risks related to changes in the nominal exchange rate**

- If the government is responsible for compensation in the event of excess volatility in nominal exchange rate, it may have to pay compensation for significant increases. To mitigate this risk, the volume of foreign currency required and the exchange rate should be monitored, and sufficient funds should be allocated for expected compensation payments.
- If the private partner faces any excess volatility in the nominal exchange rate, the private partner may not be able to cope with significant changes; the government may be faced with the cost of project cancellation and retender, or renegotiation at a higher fiscal cost. This risk can be mitigated by renegotiating the contract to re-establish financial equilibrium.

**4.1.3. Demand**

- If the PPP is **fully funded by the government**, and the **payments are linked to the volume** of service being provided:
  - **R15.** If a cap is in place, the project may be confronted with much higher demand than included in the contract, which might require a costly renegotiation of the cap or require the government to purchase services from other providers. This risk can be mitigated by managing demand and possibly diverting demand to less costly alternative services.
  - **R16.** If no cap is in place, the government may face higher-than-expected demand, leading to higher-than-expected costs. This risk can be mitigated by managing demand and possibly diverting demand to less costly alternative services.

- **R17.** If the project is suffering from insufficient demand, this may lead to project failure; the government may face costs for early termination or renegotiation. This risk can be mitigated by managing the demand or by renegotiating the contract to re-establish financial equilibrium.
- If the PPP is **fully funded by the government**, and the **payments are not linked to the volume** of service being provided:
  - **R18.** If demand is much higher than expected, the project may collapse, and the government may face the cost of early termination or contract collapse. This risk can be mitigated by managing or diverting demand, which could have a fiscal cost.
  - **R19.** If demand is much lower than expected, the project might be challenged; the government would not face additional fiscal costs, but it would pay for a service that is not/not fully being taken up by the user. This risk can be mitigated by managing demand by increasing demand or diverting it from other projects.
- If the project is either **user-funded or funded by a combination of government payments and user fees**:
  - **R20.** If users consider user fees—regulated or not—excessive relative to services received, this might have a bearing on the reputation of the government. This risk can be mitigated by effective communication.
  - **R21.** If the project is suffering from insufficient demand, this might lead to project failure, presenting the government with additional fiscal costs for early termination or renegotiation. This risk can be mitigated by managing the demand or by renegotiating the contract to re-establish financial equilibrium.

#### 4.1.4. Operation & Performance

- **R22.** If the PPP agreement does not ensure that the government has full access to information on project performance, the government may be unable to effectively manage the contract. To mitigate this risk, the information-sharing requirements should be included in the contract and addressed in the legal framework.
- **R23.** If the contract does not specify performance indicators, reference levels, and penalties or deductions, the government may face significant risks for not being able to address poor performance by the private partner. Failure to monitor project performance can lead to poor contract enforcement, which has administrative, efficiency, and political costs. It may also cause difficulties in applying project cancellation clauses and possibly in using step-in rights by financiers. To mitigate this risk, (1) key performance indicators should be included in the PPP agreement, with reference levels, linked to penalty mechanism (preferably automatic deductions from periodic payments); and (2) the core contract management team should be involved in contract negotiation to guarantee that performance indicators/levels are fair, measurable, and contractible, that is, able to be presented as evidence in court.
- **R24.** If the government does not have the capacity and procedures in place to monitor performance, it faces significant risks for not monitoring performance, which has administrative, efficiency, and political costs. To mitigate this risk, contract monitoring procedures should be in place when contracts are signed; a core contract management team should be assigned before contract closure and should be involved in contract negotiation to guarantee that contract management procedures are feasible and efficient.
- **R25.** Depending on whether and how the contract addresses the introduction of new technologies, technical innovation may create explicit and implicit fiscal risks for the government. To mitigate this risk, the duration of PPP agreements should not exceed the expected life cycle of the technology used in the sectors, enabling the government to respond to technological innovation within a reasonable timeframe. For PPP agreements for projects including high and low innovation components, it can be appropriate to separate the two components—for example, a hospital building from the medical equipment—into separate contracts that might be of different duration or nature;



the high-tech component might not be under a PPP agreement but might be undertaken as traditional public procurement.

- **R26.** If there is a scarcity of specialized human resources, this could lead to performance issues. To mitigate this risk, the government should reallocate human resources from other activities or plan capacity-building activities in advance.
- **R27.** If there is a risk of significant increases in labour costs, this may lead to project failure. To mitigate this risk, the government should plan capacity-building activities ahead of time.

#### 4.1.5. Financial

- **R28.** If the private partner is unable to obtain finance for project implementation, the government may face project failure **before implementation starts**, being forced to take over the project, re-tender, or redesign and re-tender the project. To mitigate this risk, the government should (1) undertake proper due diligence on private bidders' financial conditions and their ability (technical and managerial) to conduct the project; (2) establish adequate qualification requirements; (3) consider bid bonds and performance bonds to discourage not suitable candidates from bidding for PPPs; and (4) require some degree of commitment by financing parties during tender for very sensitive projects in less developed financial markets
- **R29.** If the private partner is unable to refinance short-term financing instruments, the government may face project failure **after implementation starts**. In such cases, the government could (1) be required to pay compensation for capital investment, (2) take over the project, or (3) renegotiate an interim financial solution and then re-tender the project (possibly under worse cost conditions for the government). To mitigate this risk, in addition to undertaking the measures listed under **R28**, the government may require bidders to obtain long-term financing for very sensitive projects.
- **R30.** If the private partner is unable to cope with excess volatility in interest rates, the government may face project failure **after implementation starts**. The government could (1) be required to pay compensation for capital investment, (2) assume the project, or (3) renegotiate an interim financial solution and then re-tender the project (possibly under worst cost conditions for the government). To mitigate this risk, the government should undertake the measures listed under the **R28**.
- **R31.** If the government contractually accepts some exchange rate risk, fiscal support may be needed in the form of compensation; it may have to pay compensation for excessive volatility of the exchange rate. Also, if the private partner is unable to cope with excess volatility in the nominal exchange rate, the government may have to (1) renegotiate under stress or face project collapse and pay compensation for capital investment; or (2) assume the project and then re-tender under a different risk allocation scheme. To mitigate these risks, the government should ensure a proper consideration of exchange rate risk, which may lead to better risk sharing and proper use of hedging mechanisms.

#### 4.1.6. Force Majeure

- **R32.** If there is no exact list of events to be considered force majeure tailored for the project, the government might have to pay compensation, adjust, or even terminate the contract due to force majeure events. Full or partial compensation by the government may even force the government to buy the assets or assume debt. To mitigate this risk, the scope of the force majeure events should be clearly stated in the contract, considering the legal requirements and specific project conditions. The contract should create incentives for the private partner to get insurance against some risks when insurance is available at a reasonable cost and to effectively manage risks by designing assets and managing services in ways that minimize the probability of occurrence and size of impact.

#### 4.1.7. Material Adverse Government Actions (MAGA)

- **R33.** If no clear definition of events to be considered MAGA is included in the contract, the government might have to pay compensation, adjust, or even terminate the contract due to acts and omissions by public entities, potentially forcing the government to buy the assets or assume debt.



To mitigate this risk, contract managers should monitor the channels through which the government's actions and omissions can affect the project during the life of the contract. Executive government actions and policy changes should be carefully evaluated by the contract manager and the fiscal management team to assess any impact on the PPP agreement.

#### **4.1.8. Change Law**

- **R34.** If the PPP agreement does not identify changes in law that do and do not require compensation by the government, the government might have to pay unforeseen compensation when adjusting or even terminating the contract due to changes in law. Changes in law might also benefit the private partner and, if not considered in the contract, increase the private partner's profit margin without benefitting the government. The cost of changes in law might include compensation payments, need to buy the asset or to assume debt, or loss of potential compensation paid by the private partner to the government. To mitigate this risk, the PPP agreement should clearly identify changes in law that trigger a compensation or the right to terminate and should define the consequences. In addition, legislation and public policies should be in place to efficiently deal with this risk.

#### **4.1.9. Rebalancing of financial equilibrium**

- **R35.** The legal framework may prescribe that the government is paying compensation and/or terminating the contract due to the requirement to reinstate financial equilibrium. The government may have to pay compensation or cancel the project. To mitigate the risk from this, the PPP agreement should restrict its application to the cases of force majeure, MAGA, avoiding its application to a wider range of situations.
- **R36.** The government might have to pay compensation and/or terminate the contract due to the contract guaranteeing a rate of return for the private partner. To mitigate this risk, clauses and expectations on a guaranteed level of project rate of return or the shareholder's rate of return should be avoided.
- **R37.** The government might have to pay compensation and/or terminate the contract due to excessive protection against some hardships. To mitigate this risk, hardship clauses, if needed, should be precise and strict. Alternative methods to reduce excessive private sector risks should be considered, including insurance, future markets, and other hedging mechanisms.

#### **4.1.10. Renegotiation**

- **R38.** If the government opens an uncontrolled renegotiation process, under information asymmetry and no competitive pressure, it might jeopardize economic efficiency by allowing the private partner to transfer to the government costs and risk that had originally been accepted by the private partner, with the fiscal impact depending on the government's ability to manage the renegotiation process. To mitigate this risk, the government should have a strategic view of PPP agreement management and create the capacity to renegotiate.

#### **4.1.11. Contract Termination**

- **R39.** If the government enters into an early termination process without clear knowledge of the consequences and procedures, the lack of clarity regarding the consequences of early termination increases the private partner's bargaining power, leading to increases in the cost of termination; possibly preventing the government from cancelling non-performing contracts, or generating incentives for governments to nationalise a project or assets without proper assessment of the cost of that decision. To mitigate this risk, contracts should include a clear definition of the reasons for early termination (for example, underperformance of the private partner, public interest, or force majeure) and should present its consequences in terms of transfer of assets and responsibilities, namely, financial compensation for capital investment. Compensation should vary according to the party responsible for the early termination.

- **R40.** If the government terminates the contract without a clear understanding of transfer processes, including financial consequences, then (1) it may need to pay for stock of inputs or outputs; (2) human resources issues may imply financial compensation or increased current expenditures; and (3) licenses needed to continued operation may create fiscal surprises. To mitigate this risk, contracts should include a clear definition of the termination process; all financial consequences and identified gaps in the contract should be resolved by having both parties sign transfer protocols detailing the rules.

## Appendix B: Risk Assessment Questionnaire

| RISK IDENTIFICATION |                                                                                                                                         |                                                                                 | LIKELIHOOD | FISCAL IMPACT                                                          | RISK RATING<br>Likelihood*Impact                                                                | MITIGATION<br>STRATEGY<br>Is it in place?               | PRIORITY<br>ACTIONS |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------|---------------------|
| 1                   | GOVERNANCE RISKS                                                                                                                        |                                                                                 |            |                                                                        |                                                                                                 |                                                         |                     |
| 1.1                 | Does the government have a strong public investment management framework (PIM) guaranteeing that this is a priority project?            |                                                                                 |            |                                                                        |                                                                                                 |                                                         |                     |
|                     | The government has a strong PIM                                                                                                         |                                                                                 |            |                                                                        |                                                                                                 |                                                         |                     |
|                     | No risks identified                                                                                                                     |                                                                                 | IF YES     |                                                                        |                                                                                                 |                                                         |                     |
|                     | The government has a weak PIM                                                                                                           |                                                                                 |            |                                                                        |                                                                                                 |                                                         |                     |
|                     | RISK 1                                                                                                                                  | The PIM may not have been strong enough to guarantee this is a priority project | IF NO      | Depends on the strengths and weaknesses of the institutional framework | Efficiency loss.<br>Implementing a non-priority project and/or not pursuing a priority project. | Reinforcing the public investment management framework. |                     |
|                     |                                                                                                                                         |                                                                                 |            |                                                                        |                                                                                                 |                                                         |                     |
| 1.2                 | Does the MoF have the experience and/or capacity to manage fiscal risks from complex, long-term projects during their whole life-cycle? |                                                                                 |            |                                                                        |                                                                                                 |                                                         |                     |
|                     | The MoF has the experience and capacity to manage fiscal risks from large investment projects                                           |                                                                                 |            |                                                                        |                                                                                                 |                                                         |                     |
|                     | No risks identified                                                                                                                     |                                                                                 | IF YES     |                                                                        |                                                                                                 |                                                         |                     |
|                     | The MoF lacks the experience and capacity to manage fiscal risks from large investment projects                                         |                                                                                 |            |                                                                        |                                                                                                 |                                                         |                     |

| RISK IDENTIFICATION |                                                                      |                                                                                                                                 |           | LIKELIHOOD                                                             | FISCAL IMPACT                                                                                                                                                          | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                                          | PRIORITY<br>ACTIONS |
|---------------------|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                     | RISK 2                                                               | The MOF may not be able to effectively manage fiscal risks arising from this project                                            | IF<br>NO  | Depends on the strengths and weaknesses of the institutional framework | Risk amplification: probability and impact of other fiscal risks may be higher than would be with adequate experience and capacity                                     |                                  | Creating capacity in the fiscal risks management team in the Ministry of Finance/Budgetary authority                                                                                               |                     |
|                     |                                                                      |                                                                                                                                 |           |                                                                        |                                                                                                                                                                        |                                  |                                                                                                                                                                                                    |                     |
| 1.3                 | Does the government disclose project and/or contract information?    |                                                                                                                                 |           |                                                                        |                                                                                                                                                                        |                                  |                                                                                                                                                                                                    |                     |
|                     | The government discloses project and/or contract information         |                                                                                                                                 |           |                                                                        |                                                                                                                                                                        |                                  |                                                                                                                                                                                                    |                     |
|                     | No risks identified                                                  |                                                                                                                                 | IF<br>YES |                                                                        |                                                                                                                                                                        |                                  |                                                                                                                                                                                                    |                     |
|                     | The government does not disclose project and/or contract information |                                                                                                                                 |           |                                                                        |                                                                                                                                                                        |                                  |                                                                                                                                                                                                    |                     |
|                     | RISK 3                                                               | Poor disclosure of project and contract information may create public concerns regarding the governance of the project/contract | IF<br>NO  | Depends on the strengths and weaknesses of the institutional framework | Efficiency loss. Lack of transparency may prevent users from acting as independent auditors of the project, and/or allow them to put pressure on changing the project. |                                  | Strong communication strategy to engage stakeholders and create ownership of the project. Clear and standardized disclosure procedures for project information and ultimately contract disclosure. |                     |
|                     |                                                                      |                                                                                                                                 |           |                                                                        |                                                                                                                                                                        |                                  |                                                                                                                                                                                                    |                     |
| 2                   | CONSTRUCTION RISKS                                                   |                                                                                                                                 |           |                                                                        |                                                                                                                                                                        |                                  |                                                                                                                                                                                                    |                     |

| RISK IDENTIFICATION |                                                                            |                                                                                                                     | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact                                   | MITIGATION<br>STRATEGY<br>Is it in place? | PRIORITY<br>ACTIONS                                                                                                                                         |
|---------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------|---------------|--------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.1                 | Risks related to land availability                                         |                                                                                                                     |            |               |                                                                    |                                           |                                                                                                                                                             |
| 2.1                 | Is land already available to the private partner?                          |                                                                                                                     |            |               |                                                                    |                                           |                                                                                                                                                             |
|                     | Land is already available to the private partner                           |                                                                                                                     |            |               |                                                                    |                                           |                                                                                                                                                             |
|                     | No risks identified                                                        | IF<br>YES                                                                                                           |            |               |                                                                    |                                           |                                                                                                                                                             |
|                     | Land is not available to the private partner                               | IF<br>NO                                                                                                            |            |               |                                                                    |                                           |                                                                                                                                                             |
| 2.1.1               | Is there a credible guarantee that land will be available for the project? |                                                                                                                     |            |               |                                                                    |                                           |                                                                                                                                                             |
|                     | RISK                                                                       | Government's additional fiscal costs arising from possible construction delays due to untimely availability of land | IF<br>YES  |               | Uncertain fiscal cost from compensation for construction delays    |                                           | Complete assessment of land needs prior to contract closure; prepare the land acquisition process; build in buffers and flexibility clauses in the contract |
|                     |                                                                            |                                                                                                                     |            |               |                                                                    |                                           |                                                                                                                                                             |
|                     | RISK                                                                       | Project cancellation due to lack of land                                                                            | IF<br>NO   |               | Costs due to compensation to private partners and project redesign |                                           | Ensure land availability at an early stage of the project cycle                                                                                             |
|                     |                                                                            |                                                                                                                     |            |               |                                                                    |                                           |                                                                                                                                                             |

| RISK IDENTIFICATION |                                                            |                                                                                                                          |        | LIKELIHOOD | FISCAL IMPACT                                                                       | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                                                             | PRIORITY<br>ACTIONS |
|---------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------|------------|-------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 2.1.2               | Will the private partner have to pay for land acquisition? |                                                                                                                          |        |            |                                                                                     |                                  |                                                                                                                                                                                                                       |                     |
|                     | RISK                                                       | Private partners may not be able to cope with the cost of land                                                           | IF YES |            | Cost of project cancellation and retender, or renegotiation with higher fiscal cost |                                  | Ensure land availability at an early stage of the project cycle, or provide sufficient information regarding the need and value of the land to ensure that the private partner is able to cope with the cost of land. |                     |
|                     |                                                            |                                                                                                                          |        |            |                                                                                     |                                  |                                                                                                                                                                                                                       |                     |
|                     | RISK                                                       | The government's additional fiscal costs arising from land acquisition and possible delays due to unavailability of land | IF NO  |            | Uncertain fiscal cost from land acquisition and compensation for possible delays    |                                  | Complete assessment of land availability and cost prior to contract closure; build in buffers and flexibility clauses in procurement and contracts                                                                    |                     |
|                     |                                                            |                                                                                                                          |        |            |                                                                                     |                                  |                                                                                                                                                                                                                       |                     |
| 2.2                 | Risks related to relocation of people and activities       |                                                                                                                          |        |            |                                                                                     |                                  |                                                                                                                                                                                                                       |                     |

| RISK IDENTIFICATION |                                                                                     |                                                                                          | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact                                                    | MITIGATION<br>STRATEGY<br>Is it in place? | PRIORITY<br>ACTIONS                                                                                             |
|---------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------|---------------|-------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 2.2                 | Are there people or activities subject to relocation due to project implementation? |                                                                                          |            |               |                                                                                     |                                           |                                                                                                                 |
|                     | People or activities are not subjected to relocation                                |                                                                                          |            |               |                                                                                     |                                           |                                                                                                                 |
|                     | No risks identified                                                                 |                                                                                          | IF<br>NO   |               |                                                                                     |                                           |                                                                                                                 |
|                     | People or activities are subjected to relocation                                    |                                                                                          | IF<br>YES  |               |                                                                                     |                                           |                                                                                                                 |
| 2.2.1               | Will the private partner have to pay for the relocation of people or activities?    |                                                                                          |            |               |                                                                                     |                                           |                                                                                                                 |
|                     | RISK                                                                                | Government paying for relocation of people and/or activities and possible project delays | IF<br>NO   |               | Cost of relocation/compensation                                                     |                                           | Timely assessment of relocation needs; stakeholder management                                                   |
|                     |                                                                                     |                                                                                          |            |               |                                                                                     |                                           |                                                                                                                 |
|                     | RISK                                                                                | Private partner not able to cope with the cost of relocation                             | IF<br>YES  |               | Cost of project cancellation and retender, or renegotiation with higher fiscal cost |                                           | Ensure timely assessment of relocation needs, and provide sufficient information on relocation needs and costs. |
|                     |                                                                                     |                                                                                          |            |               |                                                                                     |                                           |                                                                                                                 |
| 2.3                 | Risks related to land decontamination                                               |                                                                                          |            |               |                                                                                     |                                           |                                                                                                                 |

| RISK IDENTIFICATION |                                                                       |                                                                             | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact                                                    | MITIGATION<br>STRATEGY<br>Is it in place? | PRIORITY<br>ACTIONS                                                                                             |
|---------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------|------------|---------------|-------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 2.3                 | Is there a need for land decontamination?                             |                                                                             |            |               |                                                                                     |                                           |                                                                                                                 |
|                     | No need for land decontamination                                      |                                                                             |            |               |                                                                                     |                                           |                                                                                                                 |
|                     | No risks identified                                                   |                                                                             | IF<br>NO   |               |                                                                                     |                                           |                                                                                                                 |
|                     | Need for land decontamination                                         |                                                                             | IF<br>YES  |               |                                                                                     |                                           |                                                                                                                 |
| 2.3.1               | Will the private partner have to pay for decontamination?             |                                                                             |            |               |                                                                                     |                                           |                                                                                                                 |
|                     | RISK                                                                  | The government will face costs arising from land decontamination            | IF<br>NO   |               | Fiscal costs from land decontamination                                              |                                           | Timely assessment of need and cost of decontamination                                                           |
|                     |                                                                       |                                                                             |            |               |                                                                                     |                                           |                                                                                                                 |
|                     | RISK                                                                  | Private partners are not able to cope with the cost of land decontamination | IF<br>YES  |               | Cost of project cancellation and retender, or renegotiation with higher fiscal cost |                                           | Ensure timely assessment of decontamination needs, and provide sufficient information regarding land condition. |
|                     |                                                                       |                                                                             |            |               |                                                                                     |                                           |                                                                                                                 |
| 2.4                 | Risks related to environmental and archaeological issues.             |                                                                             |            |               |                                                                                     |                                           |                                                                                                                 |
| 2.4                 | Is there a possibility of facing environmental/archaeological issues? |                                                                             |            |               |                                                                                     |                                           |                                                                                                                 |



| RISK IDENTIFICATION |                                                                                   |                                                                                                               | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact                                                                                         | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                 | PRIORITY<br>ACTIONS |
|---------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------|---------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                     | No risks from environmental and archaeological issues                             |                                                                                                               |            |               |                                                                                                                          |                                                                                                                                           |                     |
|                     | No risks identified                                                               |                                                                                                               | IF<br>NO   |               |                                                                                                                          |                                                                                                                                           |                     |
|                     | There are risks from environmental and archaeological issues                      |                                                                                                               | IF<br>YES  |               |                                                                                                                          |                                                                                                                                           |                     |
| 2.4.1               | Will the private partner have to pay for environmental and archaeological issues? |                                                                                                               |            |               |                                                                                                                          |                                                                                                                                           |                     |
|                     | RISK                                                                              | Government costs arising from environmental or archaeological issues and from compensation for project delays | IF<br>NO   |               | Government costs from environmental or archaeological issues, and compensation to private partners due to project delays | Environmental constraints specified prior to tender (including permits and licenses); develop a plan to deal with archaeological findings |                     |
|                     |                                                                                   |                                                                                                               |            |               |                                                                                                                          |                                                                                                                                           |                     |
|                     | RISK                                                                              | The private partner is not able to cope with the cost of environmental or archaeological issues               | IF<br>YES  |               | Cost of project cancellation and retender, or renegotiation with higher fiscal cost                                      | Environmental constraints specified prior to tender (including permits and licenses); develop a plan to deal with archaeological findings |                     |
|                     |                                                                                   |                                                                                                               |            |               |                                                                                                                          |                                                                                                                                           |                     |
| 2.5                 | Risks related to geological issues.                                               |                                                                                                               |            |               |                                                                                                                          |                                                                                                                                           |                     |

| RISK IDENTIFICATION |                                                                           |                                                                                | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place? | PRIORITY<br>ACTIONS |
|---------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------|---------------|----------------------------------|-------------------------------------------|---------------------|
| 2.5                 | Is there a possibility that the project phases geological issues?         |                                                                                |            |               |                                  |                                           |                     |
|                     | No risks from geological issues                                           |                                                                                |            |               |                                  |                                           |                     |
|                     | No risks identified                                                       |                                                                                | IF<br>NO   |               |                                  |                                           |                     |
|                     | There are risks from geological issues                                    |                                                                                | IF<br>YES  |               |                                  |                                           |                     |
| 2.5.1               | Will the private partner have to pay for geological issues?               |                                                                                |            |               |                                  |                                           |                     |
|                     | RISK                                                                      | The government will pay compensation for significant geological issues         | IF<br>NO   |               |                                  |                                           |                     |
|                     |                                                                           |                                                                                |            |               |                                  |                                           |                     |
|                     | RISK                                                                      | The private partner may not be able to cope with the cost of geological issues | IF<br>YES  |               |                                  |                                           |                     |
|                     |                                                                           |                                                                                |            |               |                                  |                                           |                     |
| 2.6                 | Risks related to licensing (e.g. subnational).                            |                                                                                |            |               |                                  |                                           |                     |
| 2.6                 | Will the project be subjected to licensing (e.g. subnational)?            |                                                                                |            |               |                                  |                                           |                     |
|                     | No risks from lack of licensing or project delays due to licensing        |                                                                                |            |               |                                  |                                           |                     |
|                     | No risks identified                                                       |                                                                                | IF<br>NO   |               |                                  |                                           |                     |
|                     | There are risks from lack of licensing or project delays due to licensing |                                                                                |            |               |                                  |                                           |                     |

| RISK IDENTIFICATION |                                                                                   |                                                                                       |           | LIKELIHOOD | FISCAL IMPACT                                                      | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                       | PRIORITY<br>ACTIONS |
|---------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------|------------|--------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                     | RISK                                                                              | The government pays compensation for project delays due to delayed licensing          | IF<br>YES |            | Costs of compensation for project delays                           |                                  | Ensure that subnational governments are fully supportive of the project and that project deadlines are consistent with subnational regulations. |                     |
|                     |                                                                                   |                                                                                       |           |            |                                                                    |                                  |                                                                                                                                                 |                     |
| 2.7                 | Risks related to failures/errors/omissions in project design.                     |                                                                                       |           |            |                                                                    |                                  |                                                                                                                                                 |                     |
| 2.7                 | Can the government be held responsible for design failures, errors, or omissions? |                                                                                       |           |            |                                                                    |                                  |                                                                                                                                                 |                     |
|                     | No risks related to failures/errors/omissions in project design                   |                                                                                       |           |            |                                                                    |                                  |                                                                                                                                                 |                     |
|                     | No risks identified                                                               |                                                                                       | IF<br>NO  |            |                                                                    |                                  |                                                                                                                                                 |                     |
|                     | There are risks related to failures/errors/omissions in project design            |                                                                                       |           |            |                                                                    |                                  |                                                                                                                                                 |                     |
|                     | RISK                                                                              | The government pays compensation for failures in designs presented to private partner | IF<br>YES |            | Costs of design risks not fully transferred to the private partner |                                  | The tender process and the contract should ensure that the private partner takes full responsibility for the design                             |                     |
|                     |                                                                                   |                                                                                       |           |            |                                                                    |                                  |                                                                                                                                                 |                     |

| RISK IDENTIFICATION |                                                                                                                       |                                                                              | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place? | PRIORITY<br>ACTIONS                                                                                                                        |
|---------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|---------------|----------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 2.8                 | Risks related to inherent defects in assets transferred to the private partner.                                       |                                                                              |            |               |                                  |                                           |                                                                                                                                            |
| 2.8                 | Can the government be held responsible for any inherent defect in assets transferred to the private partner?          |                                                                              |            |               |                                  |                                           |                                                                                                                                            |
|                     | No risks related to inherent defects in assets transferred to the private partner                                     |                                                                              |            |               |                                  |                                           |                                                                                                                                            |
|                     | No risks identified                                                                                                   | IF<br>NO                                                                     |            |               |                                  |                                           |                                                                                                                                            |
|                     | There are risks related to inherent defects in assets transferred to the private partner                              |                                                                              |            |               |                                  |                                           |                                                                                                                                            |
|                     | RISK                                                                                                                  | The government pays compensation to the private partner for inherent defects | IF<br>YES  |               | Costs of defects remediation     |                                           | Prior assessment of the quality of the assets to be transferred to the private partner, allowing for full pricing of identifiable defects. |
|                     |                                                                                                                       |                                                                              |            |               |                                  |                                           |                                                                                                                                            |
| 2.9                 | Risks related to changes in project design and scope required by procuring agencies.                                  |                                                                              |            |               |                                  |                                           |                                                                                                                                            |
| 2.9                 | Can the government be responsible for compensation due to changes in design and scope required by procuring agencies? |                                                                              |            |               |                                  |                                           |                                                                                                                                            |
|                     | No risks related to changes in project design or scope required by procuring agencies                                 |                                                                              |            |               |                                  |                                           |                                                                                                                                            |

| RISK IDENTIFICATION |                                                                                                       |                                                                          | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact                                              | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                  | PRIORITY<br>ACTIONS |
|---------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------|---------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                     | No risks identified                                                                                   |                                                                          | IF<br>NO   |               |                                                                               |                                                                                                                                                                            |                     |
|                     | There are risks related to changes in project design or scope required by procuring agencies          |                                                                          |            |               |                                                                               |                                                                                                                                                                            |                     |
|                     | RISK                                                                                                  | The government pays compensation for changes in design and scope         | IF<br>YES  |               | Changes in net costs due to changes in the design and/or scope of the project | Contract provisions allow for changes in the design/scope of the project up to a limit (predetermined); improve accountability framework to monitor project cost overruns. |                     |
|                     |                                                                                                       |                                                                          |            |               |                                                                               |                                                                                                                                                                            |                     |
| 2.10                | Risks related to changes in input prices                                                              |                                                                          |            |               |                                                                               |                                                                                                                                                                            |                     |
| 2.10.               | Can the government be responsible for compensation in the event of excess volatility in input prices? |                                                                          |            |               |                                                                               |                                                                                                                                                                            |                     |
|                     | There are risks for the government related to changes in input prices                                 |                                                                          |            |               |                                                                               |                                                                                                                                                                            |                     |
|                     | RISK                                                                                                  | The government pays compensation for significant changes in input prices | IF<br>YES  |               |                                                                               |                                                                                                                                                                            |                     |
|                     |                                                                                                       |                                                                          |            |               |                                                                               |                                                                                                                                                                            |                     |
|                     | No risks for the government related to changes in input prices                                        |                                                                          | IF<br>NO   |               |                                                                               |                                                                                                                                                                            |                     |
| 2.10.1              | Will the private partner have to face excess volatility of input prices?                              |                                                                          |            |               |                                                                               |                                                                                                                                                                            |                     |

| RISK IDENTIFICATION |                                                                                                                    |                                                                                             |           | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place? | PRIORITY<br>ACTIONS |
|---------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------|------------|---------------|----------------------------------|-------------------------------------------|---------------------|
|                     | No risks identified                                                                                                |                                                                                             |           | IF<br>NO   |               |                                  |                                           |                     |
|                     |                                                                                                                    |                                                                                             |           |            |               |                                  |                                           |                     |
|                     | RISK                                                                                                               | The private partner may not be able to cope with significant changes in input prices        | IF<br>YES |            |               |                                  |                                           |                     |
|                     |                                                                                                                    |                                                                                             |           |            |               |                                  |                                           |                     |
| 2.11                | Risks related to changes in the nominal exchange rate.                                                             |                                                                                             |           |            |               |                                  |                                           |                     |
| 2.11                | Can the government be responsible for compensation in the event of excess volatility in the nominal exchange rate? |                                                                                             |           |            |               |                                  |                                           |                     |
|                     | There are risks for the government related to changes in the nominal exchange rate                                 |                                                                                             |           |            |               |                                  |                                           |                     |
|                     | RISK                                                                                                               | The government pays compensation for a significant increase in the nominal exchange rate    | IF<br>YES |            |               |                                  |                                           |                     |
|                     |                                                                                                                    |                                                                                             |           |            |               |                                  |                                           |                     |
| 2.11.1              | Will the private partner have to face excess volatility of the nominal exchange rate?                              |                                                                                             |           |            |               |                                  |                                           |                     |
|                     | No risks identified                                                                                                |                                                                                             | IF<br>NO  |            |               |                                  |                                           |                     |
|                     |                                                                                                                    |                                                                                             |           |            |               |                                  |                                           |                     |
|                     | RISK                                                                                                               | The private partner may not be able to cope with excess volatility in nominal exchange rate | IF<br>YES |            |               |                                  |                                           |                     |
|                     |                                                                                                                    |                                                                                             |           |            |               |                                  |                                           |                     |
| 3                   | DEMAND RISKS                                                                                                       |                                                                                             |           |            |               |                                  |                                           |                     |

| RISK IDENTIFICATION |                                                                       |                                                                 | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact                                                                              | MITIGATION<br>STRATEGY<br>Is it in place?                                              | PRIORITY<br>ACTIONS |
|---------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------|------------|---------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------|
| 3.1                 | Is the PPP project fully funded by the government?                    |                                                                 |            |               |                                                                                                               |                                                                                        |                     |
| 3.1                 | The PPP is fully government-funded                                    | IF<br>YES                                                       |            |               |                                                                                                               |                                                                                        |                     |
|                     | <i>How are government payments to the private partner determined?</i> |                                                                 |            |               |                                                                                                               |                                                                                        |                     |
| 3.1.1               | The government payments are linked to the volume of services provided |                                                                 |            |               |                                                                                                               |                                                                                        |                     |
|                     | <i>If demand for services is higher than originally expected</i>      |                                                                 |            |               |                                                                                                               |                                                                                        |                     |
| 3.1.1.1             | Does the PPP contract set a cap for government payments?              |                                                                 |            |               |                                                                                                               |                                                                                        |                     |
|                     |                                                                       |                                                                 |            |               |                                                                                                               |                                                                                        |                     |
|                     | RISK                                                                  | Facing demand much higher than the cap included in the contract | IF<br>YES  |               | The additional fiscal cost of renegotiating the cap; government cost of services delivered by other providers | E.g.: Manage demand (reduce or divert demand)                                          |                     |
|                     |                                                                       |                                                                 |            |               |                                                                                                               |                                                                                        |                     |
|                     |                                                                       |                                                                 |            |               |                                                                                                               |                                                                                        |                     |
|                     | RISK                                                                  | Facing demand higher than originally expected                   | IF<br>NO   |               | The government pays for the provision of additional services                                                  | E.g.: Manage demand (reduce or divert demand if the cost of the alternative is lower). |                     |
|                     |                                                                       |                                                                 |            |               |                                                                                                               |                                                                                        |                     |
|                     | <i>If demand for services is lower than originally expected</i>       |                                                                 |            |               |                                                                                                               |                                                                                        |                     |

| RISK IDENTIFICATION |                                                                           |                                                                                                                |        | LIKELIHOOD | FISCAL IMPACT                                                     | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                                                        | PRIORITY<br>ACTIONS |
|---------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------|------------|-------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 3.1.1.2             | Can the government influence demand?                                      |                                                                                                                |        |            |                                                                   |                                  |                                                                                                                                                                                                                  |                     |
|                     | RISK                                                                      | Facing insufficient demand for services--when the government can influence demand--may lead to project failure | IF YES |            | Additional fiscal costs of early termination or renegotiation     |                                  | E.g.: Manage demand (increase demand or divert demand from other projects to this one); renegotiate the contract to re-establish financial equilibrium. In addition, mitigation measures will have fiscal costs. |                     |
|                     |                                                                           |                                                                                                                |        |            |                                                                   |                                  |                                                                                                                                                                                                                  |                     |
|                     | RISK                                                                      | Facing insufficient demand for services--when demand is market-determined - may lead to project failure        | IF NO  |            | Additional fiscal costs of early termination or renegotiation     |                                  | E.g. Renegotiate contract to re-establish financial equilibrium                                                                                                                                                  |                     |
|                     |                                                                           |                                                                                                                |        |            |                                                                   |                                  |                                                                                                                                                                                                                  |                     |
| 3.1.2               | Government payments are not linked to the volume of the services provided |                                                                                                                |        |            |                                                                   |                                  |                                                                                                                                                                                                                  |                     |
|                     | <i>If demand for services is higher than originally expected</i>          |                                                                                                                |        |            |                                                                   |                                  |                                                                                                                                                                                                                  |                     |
|                     | RISK                                                                      | Project collapse due to demand much higher than originally expected                                            |        |            | Additional fiscal cost for early termination if contract collapse |                                  | E.g.: Manage demand (reduce demand, divert demand), which could have a fiscal cost                                                                                                                               |                     |
|                     |                                                                           |                                                                                                                |        |            |                                                                   |                                  |                                                                                                                                                                                                                  |                     |



| RISK IDENTIFICATION |                                                                                                       |                                                                                                                 |           | LIKELIHOOD | FISCAL IMPACT                                                 | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                  | PRIORITY<br>ACTIONS |
|---------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------|------------|---------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                     | <i>If demand for services is lower than originally expected</i>                                       |                                                                                                                 |           |            |                                                               |                                  |                                                                                                                                                            |                     |
|                     | RISK                                                                                                  | The project is challenged due to demand much lower than originally expected                                     |           |            | No additional fiscal cost                                     |                                  | E.g.: Manage demand (increase demand or divert it from other projects), which would have a fiscal cost                                                     |                     |
|                     |                                                                                                       |                                                                                                                 |           |            |                                                               |                                  |                                                                                                                                                            |                     |
| 3.2                 | The PPP project is either user-funded or funded by a combination of government payments and user fees |                                                                                                                 | IF<br>NO  |            |                                                               |                                  |                                                                                                                                                            |                     |
| 3.2.1               | Are maximum user fees specified in the contract?                                                      |                                                                                                                 |           |            |                                                               |                                  |                                                                                                                                                            |                     |
|                     | RISK                                                                                                  | Users may consider regulated user fees excessive relative to services received                                  | IF<br>YES |            | No additional fiscal cost                                     |                                  | Good communication                                                                                                                                         |                     |
|                     |                                                                                                       |                                                                                                                 |           |            |                                                               |                                  |                                                                                                                                                            |                     |
|                     | RISK                                                                                                  | Users may consider non-regulated user fees excessive relative to services received                              | IF<br>NO  |            | No additional fiscal cost                                     |                                  | Good communication                                                                                                                                         |                     |
|                     |                                                                                                       |                                                                                                                 |           |            |                                                               |                                  |                                                                                                                                                            |                     |
| 3.2.2               | Can the government influence demand?                                                                  |                                                                                                                 |           |            |                                                               |                                  |                                                                                                                                                            |                     |
|                     | RISK                                                                                                  | Facing insufficient demand for services--when the government can influence demand--may lead to project failure. | IF<br>YES |            | Additional fiscal costs of early termination or renegotiation |                                  | E.g.: Manage demand (increase demand or divert demand from other projects to this one); renegotiate the contract to re-establish financial equilibrium. In |                     |

| RISK IDENTIFICATION |                                                                                          |                                                                                                       |        | LIKELIHOOD | FISCAL IMPACT                                                 | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                       | PRIORITY<br>ACTIONS |
|---------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------|------------|---------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------|---------------------|
|                     |                                                                                          |                                                                                                       |        |            |                                                               |                                  | addition, mitigation measures will have fiscal costs.           |                     |
|                     |                                                                                          |                                                                                                       |        |            |                                                               |                                  |                                                                 |                     |
|                     | RISK                                                                                     | Facing insufficient demand for services--when demand is market-determined-may lead to project failure | IF NO  |            | Additional fiscal costs of early termination or renegotiation |                                  | E.g. Renegotiate contract to re-establish financial equilibrium |                     |
|                     |                                                                                          |                                                                                                       |        |            |                                                               |                                  |                                                                 |                     |
| 4                   | OPERATIONAL AND PERFORMANCE RISKS                                                        |                                                                                                       |        |            |                                                               |                                  |                                                                 |                     |
| 4.1                 | Risks related to information access                                                      |                                                                                                       |        |            |                                                               |                                  |                                                                 |                     |
| 4.1                 | Does the contract give the government full access to information on project performance? |                                                                                                       |        |            |                                                               |                                  |                                                                 |                     |
|                     | The contract gives the government full access to project performance information         |                                                                                                       |        |            |                                                               |                                  |                                                                 |                     |
|                     | No risks identified                                                                      |                                                                                                       | IF YES |            |                                                               |                                  |                                                                 |                     |
|                     | The contract does not give the government full access to project performance information |                                                                                                       |        |            |                                                               |                                  |                                                                 |                     |

| RISK IDENTIFICATION |                                                                                                          |                                                                                            |           | LIKELIHOOD | FISCAL IMPACT                                                                 | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                                                                          | PRIORITY<br>ACTIONS |
|---------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------|------------|-------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                     | RISK                                                                                                     | The government faces significant risks for not having access to information on performance | IF<br>NO  |            |                                                                               |                                  |                                                                                                                                                                                                                                    |                     |
|                     |                                                                                                          |                                                                                            |           |            |                                                                               |                                  |                                                                                                                                                                                                                                    |                     |
| 4.2                 | Risks related to the disclosure of information                                                           |                                                                                            |           |            |                                                                               |                                  |                                                                                                                                                                                                                                    |                     |
| 4.2                 | Does the contract clearly specify performance indicators, reference levels, and penalties/deductions?    |                                                                                            |           |            |                                                                               |                                  |                                                                                                                                                                                                                                    |                     |
|                     | The contract clearly specifies performance indicators, reference levels, and penalties and/or deductions |                                                                                            | IF<br>YES |            |                                                                               |                                  |                                                                                                                                                                                                                                    |                     |
| 4.2.1               | Does the government have the capacity/procedures in place to monitor performance?                        |                                                                                            |           |            |                                                                               |                                  |                                                                                                                                                                                                                                    |                     |
|                     | No risks identified                                                                                      |                                                                                            | IF<br>YES |            |                                                                               |                                  |                                                                                                                                                                                                                                    |                     |
|                     |                                                                                                          |                                                                                            |           |            |                                                                               |                                  |                                                                                                                                                                                                                                    |                     |
|                     | RISK                                                                                                     | The government faces significant risks for not monitoring performance                      | IF<br>NO  |            | Poor contract enforcement has administrative, efficiency and political costs. |                                  | Contract monitor procedures should be in place when contracts are signed. The core contract management team should be hired before contract closure and be involved in contract negotiation, to guarantee that contract management |                     |

| RISK IDENTIFICATION |                                                                                                      |                                                                                                               |                  | LIKELIHOOD | FISCAL IMPACT                                                                                                                                                                                                                                   | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                                                                                                                                                                                                                                                    | PRIORITY<br>ACTIONS |
|---------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                     |                                                                                                      |                                                                                                               |                  |            |                                                                                                                                                                                                                                                 |                                  | procedures are feasible and efficient.                                                                                                                                                                                                                                                                                                                                                                       |                     |
|                     |                                                                                                      |                                                                                                               |                  |            |                                                                                                                                                                                                                                                 |                                  |                                                                                                                                                                                                                                                                                                                                                                                                              |                     |
|                     | The contract does not specify performance indicators, reference levels, penalties and/or deductions. |                                                                                                               | <i>IF<br/>NO</i> |            |                                                                                                                                                                                                                                                 |                                  |                                                                                                                                                                                                                                                                                                                                                                                                              |                     |
|                     |                                                                                                      |                                                                                                               |                  |            |                                                                                                                                                                                                                                                 |                                  |                                                                                                                                                                                                                                                                                                                                                                                                              |                     |
|                     | RISK                                                                                                 | The government faces significant risks for not being able to punish the private partner for poor performance. |                  |            | Non-monitoring of project performance reduces contract enforcement. It has administrative, efficiency, and political costs. Potential difficulties in applying project cancellation clauses and possibly in using step-in rights by financiers. |                                  | Key performance indicators should be included in PPP contracts, with reference levels, linked to penalty mechanisms (preferably automatic deductions from periodic payments). The core contract management team should be involved in contract negotiation to guarantee that performance indicators/levels are fair, measurable, and contractible (i.e., capable of being presented as evidence in a court). |                     |

| RISK IDENTIFICATION |                                                                      |                                                                                        |        | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place? | PRIORITY<br>ACTIONS |
|---------------------|----------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------|------------|---------------|----------------------------------|-------------------------------------------|---------------------|
|                     |                                                                      |                                                                                        |        |            |               |                                  |                                           |                     |
| 4.3                 | Risks related to technical innovation                                |                                                                                        |        |            |               |                                  |                                           |                     |
| 4.3                 | Does the contract address the introduction of technical innovation?  |                                                                                        |        |            |               |                                  |                                           |                     |
|                     | RISK                                                                 | Technical innovation may create explicit and implicit fiscal risks for the government. | IF YES |            |               |                                  |                                           |                     |
|                     |                                                                      |                                                                                        |        |            |               |                                  |                                           |                     |
|                     | RISK                                                                 | Technical innovation may create implicit fiscal risks for the government               | IF NO  |            |               |                                  |                                           |                     |
|                     |                                                                      |                                                                                        |        |            |               |                                  |                                           |                     |
| 4.4                 | Risks related to the scarcity of specialized human resources         |                                                                                        |        |            |               |                                  |                                           |                     |
| 4.4                 | Is there the possibility of scarcity of specialized human resources? |                                                                                        |        |            |               |                                  |                                           |                     |
|                     | Specialized human resources are adequate.                            |                                                                                        |        |            |               |                                  |                                           |                     |
|                     | No risks identified                                                  |                                                                                        | IF NO  |            |               |                                  |                                           |                     |
|                     | There are risks of scarcity of specialized human resources.          |                                                                                        |        |            |               |                                  |                                           |                     |
|                     | RISK                                                                 | Performance issues due to scarcity of specialized human resources                      | IF YES |            |               |                                  |                                           |                     |
|                     |                                                                      |                                                                                        |        |            |               |                                  |                                           |                     |
| 4.5                 | Risks related to significant changes in labour costs                 |                                                                                        |        |            |               |                                  |                                           |                     |
| 4.5                 | Is there the possibility of significant changes in labour costs?     |                                                                                        |        |            |               |                                  |                                           |                     |

| RISK IDENTIFICATION |                                                                             |                                                                                                                     | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact                                                                                 | MITIGATION<br>STRATEGY<br>Is it in place?                                                                     | PRIORITY<br>ACTIONS |
|---------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------|---------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------|
|                     | There are no credible possibilities of significant changes in labour costs. |                                                                                                                     |            |               |                                                                                                                  |                                                                                                               |                     |
|                     | No risks identified                                                         |                                                                                                                     | IF<br>NO   |               |                                                                                                                  |                                                                                                               |                     |
|                     | There is a possibility of significant changes in labour costs.              |                                                                                                                     |            |               |                                                                                                                  |                                                                                                               |                     |
|                     | RISK                                                                        | Facing significant changes in labour costs--with the same technology and productivity--may lead to project failure. | IF<br>YES  |               |                                                                                                                  |                                                                                                               |                     |
|                     |                                                                             |                                                                                                                     |            |               |                                                                                                                  |                                                                                                               |                     |
| 5                   | FINANCIAL RISKS                                                             |                                                                                                                     |            |               |                                                                                                                  |                                                                                                               |                     |
| 5.1                 | Risks related to the availability of funds                                  |                                                                                                                     |            |               |                                                                                                                  |                                                                                                               |                     |
| 5.1                 | Is the private partner able to obtain finance for project implementation?   |                                                                                                                     |            |               |                                                                                                                  |                                                                                                               |                     |
|                     | The private partner is able to obtain finance for project implementation.   |                                                                                                                     |            |               |                                                                                                                  |                                                                                                               |                     |
|                     | No risks identified                                                         |                                                                                                                     | IF<br>YES  |               |                                                                                                                  |                                                                                                               |                     |
|                     | The private partner is unable to obtain finance for project implementation. |                                                                                                                     |            |               |                                                                                                                  |                                                                                                               |                     |
|                     | RISK                                                                        | The private partner is unable to obtain finance for project implementation.                                         | IF<br>NO   |               | The government may face project failure before implementation starts, being forced to take over the project, re- | Proper due diligence on private bidders' financial conditions and their ability (technical and managerial) to |                     |

| RISK IDENTIFICATION |                                                                              |        |  | LIKELIHOOD | FISCAL IMPACT                                  | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                                                                                                                                                                 | PRIORITY<br>ACTIONS |
|---------------------|------------------------------------------------------------------------------|--------|--|------------|------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                     |                                                                              |        |  |            | tender, or redesign and re-tender the project. |                                  | conduct the project. The establishment of adequate qualification requirements, bid bonds and performance bonds will discourage adventures from bidding for PPPs. For very sensitive projects, governments with less developed financial markets may require some degree of commitment by financing parties during tender. |                     |
|                     |                                                                              |        |  |            |                                                |                                  |                                                                                                                                                                                                                                                                                                                           |                     |
| 5.2                 | Risks related to refinancing                                                 |        |  |            |                                                |                                  |                                                                                                                                                                                                                                                                                                                           |                     |
| 5.2                 | Is the private partner able to refinance short-term financing instruments?   |        |  |            |                                                |                                  |                                                                                                                                                                                                                                                                                                                           |                     |
|                     | The private partner can refinance short-term financing instruments           |        |  |            |                                                |                                  |                                                                                                                                                                                                                                                                                                                           |                     |
|                     | No risks identified                                                          | IF YES |  |            |                                                |                                  |                                                                                                                                                                                                                                                                                                                           |                     |
|                     | The private partner is unable to refinance short-term financing instruments. |        |  |            |                                                |                                  |                                                                                                                                                                                                                                                                                                                           |                     |

| RISK IDENTIFICATION |                                                                                   |                                                                              |          | LIKELIHOOD | FISCAL IMPACT                                                                                                                                                                                                                                                                                                   | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                                                                                                                                                                                                                  | PRIORITY<br>ACTIONS |
|---------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                     | RISK                                                                              | The private partner is unable to refinance short-term financing instruments. | IF<br>NO |            | The government may face project failure after implementation starts, and thus be required to pay compensation for capital investment, be forced to take over the project, or renegotiate an interim financial solution and then re-tender the project (possibly under worse cost conditions for the government) |                                  | Proper due diligence on private bidders' financial conditions and their ability (technical and managerial) to conduct the project. The establishment of adequate qualification requirements, bid bonds and performance bonds will discourage adventures from bidding for PPPs. For very sensitive projects, governments may require bidders to obtain long-term financing. |                     |
|                     |                                                                                   |                                                                              |          |            |                                                                                                                                                                                                                                                                                                                 |                                  |                                                                                                                                                                                                                                                                                                                                                                            |                     |
| 5.3                 | Risks related to excess volatility of interest rates                              |                                                                              |          |            |                                                                                                                                                                                                                                                                                                                 |                                  |                                                                                                                                                                                                                                                                                                                                                                            |                     |
| 5.3                 | Is the private partner able to cope with excess volatility of interest rates?     |                                                                              |          |            |                                                                                                                                                                                                                                                                                                                 |                                  |                                                                                                                                                                                                                                                                                                                                                                            |                     |
|                     | The private partner is able to cope with the excess volatility of interest rates. |                                                                              |          |            |                                                                                                                                                                                                                                                                                                                 |                                  |                                                                                                                                                                                                                                                                                                                                                                            |                     |



| RISK IDENTIFICATION |                                                                                                            |                                                                                 | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact                                                                                                                                                                                                                                                                              | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                                                                                                                      | PRIORITY<br>ACTIONS |
|---------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                     | No risks identified                                                                                        |                                                                                 | IF<br>YES  |               |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                |                     |
|                     | The private partner is unable to cope with the excess volatility of interest rates.                        |                                                                                 |            |               |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                |                     |
|                     | RISK                                                                                                       | The private partner is unable to cope with excess volatility in interest rates. | IF<br>NO   |               | The government may face project failure after implementation starts, so being required to pay compensation for capital investment, being forced to assume the project, or renegotiate an interim financial solution and then re-tender the project (possibly under worst cost conditions for the government). | Proper due diligence on private bidders' financial conditions and their ability (technical and managerial) to conduct the project. The establishment of adequate qualification requirements, bid bonds and performance bonds will discourage adventures from bidding for PPPs. |                     |
|                     |                                                                                                            |                                                                                 |            |               |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                |                     |
| 5.4                 | Risks related to excess volatility of nominal exchange rate                                                |                                                                                 |            |               |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                |                     |
| 5.4.1               | Has the government accepted contractual responsibility for excess volatility of the nominal exchange rate? |                                                                                 | Yes        |               |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                |                     |
|                     |                                                                                                            |                                                                                 |            |               |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                |                     |
|                     | No risks identified                                                                                        |                                                                                 | IF<br>NO   |               |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                |                     |

| RISK IDENTIFICATION |                                                                                                |                                                                                            |        | LIKELIHOOD | FISCAL IMPACT                                                                                                                                                                                        | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                        | PRIORITY<br>ACTIONS |
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|                     |                                                                                                |                                                                                            |        |            |                                                                                                                                                                                                      |                                  |                                                                                                                  |                     |
|                     | RISK                                                                                           | Government paying compensation for excessive volatility of exchange rate                   | IF YES |            | If the government contractually accepts some exchange rate risk, fiscal support may be needed in the form of compensation.                                                                           |                                  | Proper consideration of exchange rate risk may lead to better risk sharing and proper use of hedging mechanisms. |                     |
|                     |                                                                                                |                                                                                            |        |            |                                                                                                                                                                                                      |                                  |                                                                                                                  |                     |
| 5.4.2               | Is the private partner able to cope with the excess volatility of the nominal exchange rate?   |                                                                                            |        |            |                                                                                                                                                                                                      |                                  |                                                                                                                  |                     |
|                     | The private partner can cope with the excess volatility of the nominal exchange rate.          |                                                                                            |        |            |                                                                                                                                                                                                      |                                  |                                                                                                                  |                     |
|                     | No risks identified                                                                            |                                                                                            | IF YES |            |                                                                                                                                                                                                      |                                  |                                                                                                                  |                     |
|                     | The private partner is unable to cope with the excess volatility of the nominal exchange rate. |                                                                                            |        |            |                                                                                                                                                                                                      |                                  |                                                                                                                  |                     |
|                     | RISK                                                                                           | The private partner is unable to cope with excess volatility in the nominal exchange rate. | IF NO  |            | The government may have to renegotiate under stress, or face project collapse and being required to pay compensation for capital investment, having to assume the project and then re-tender under a |                                  | Proper consideration of exchange rate risk may lead to better risk sharing and proper use of hedging mechanisms. |                     |

| RISK IDENTIFICATION |                                                     |                                                                                                             |  | LIKELIHOOD                                                                                   | FISCAL IMPACT                                                                                                  | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                                                                                                                                                                                    | PRIORITY<br>ACTIONS |
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|                     |                                                     |                                                                                                             |  |                                                                                              | different risk allocation scheme.                                                                              |                                  |                                                                                                                                                                                                                                                                                                                                              |                     |
|                     |                                                     |                                                                                                             |  |                                                                                              |                                                                                                                |                                  |                                                                                                                                                                                                                                                                                                                                              |                     |
| 6                   | FORCE MAJEURE                                       |                                                                                                             |  |                                                                                              |                                                                                                                |                                  |                                                                                                                                                                                                                                                                                                                                              |                     |
| 6.1                 | Projects are always exposed to force majeure risks. |                                                                                                             |  |                                                                                              |                                                                                                                |                                  |                                                                                                                                                                                                                                                                                                                                              |                     |
|                     |                                                     |                                                                                                             |  |                                                                                              |                                                                                                                |                                  |                                                                                                                                                                                                                                                                                                                                              |                     |
|                     | RISK                                                | The government paying compensation, adjusting or even terminating the contract due to force majeure events. |  | The exact list of events to be considered force majeure should be tailored for each project. | Full or partial compensation by the government may even force the government to buy the assets or assume debt. |                                  | The scope of the force majeure events should be clearly stated in the contract, considering the legal requirements and specific project conditions; the contract should create incentives for the private partner to get insurance against some risks (when insurance is available at a reasonable cost), and to effectively manage risks by |                     |

| RISK IDENTIFICATION |                                                                                      |  |  | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                          | PRIORITY<br>ACTIONS |
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|                     |                                                                                      |  |  |            |               |                                  | designing assets and managing services in ways that minimize the probability of occurrence and size of the impact. |                     |
|                     |                                                                                      |  |  |            |               |                                  |                                                                                                                    |                     |
| 7                   | MATERIAL ADVERSE GOVERNMENT ACTIONS (MAGA)                                           |  |  |            |               |                                  |                                                                                                                    |                     |
| 7.1                 | Projects are always exposed to MAGA events (also known as "political force majeure") |  |  |            |               |                                  |                                                                                                                    |                     |
|                     |                                                                                      |  |  |            |               |                                  |                                                                                                                    |                     |

| RISK IDENTIFICATION |                                                    |                                                                                                                              |  | LIKELIHOOD                                                                            | FISCAL IMPACT                                                                                  | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                                                                                                                                                                                      | PRIORITY<br>ACTIONS |
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|                     | RISK                                               | The government paying compensation, adjusting or even terminating the contract due to acts and omissions by public entities. |  | a clear definition of events to be considered MAGA should be included in the contract | Compensation by the government may even force the government to buy the assets or assume debt. |                                  | Contract managers should monitor the several channels through which government actions and omissions can affect the project; during the life of the contract, executive government actions and policy changes should be carefully evaluated (by the contract manager and the fiscal management team) to assess the impact on the PPP contract. |                     |
|                     |                                                    |                                                                                                                              |  |                                                                                       |                                                                                                |                                  |                                                                                                                                                                                                                                                                                                                                                |                     |
| 8                   | CHANGE IN LAW                                      |                                                                                                                              |  |                                                                                       |                                                                                                |                                  |                                                                                                                                                                                                                                                                                                                                                |                     |
| 8.1                 | Projects are always exposed to changes in the law. |                                                                                                                              |  |                                                                                       |                                                                                                |                                  |                                                                                                                                                                                                                                                                                                                                                |                     |
|                     |                                                    |                                                                                                                              |  |                                                                                       |                                                                                                |                                  |                                                                                                                                                                                                                                                                                                                                                |                     |

| RISK IDENTIFICATION |                                                                                                        |                                                                                                          |          | LIKELIHOOD                                                                                                                                                                                                                 | FISCAL IMPACT                                                                                                                                                      | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                               | PRIORITY<br>ACTIONS |
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|                     | RISK                                                                                                   | The government is paying compensation, adjusting or even terminating the contract due to changes in law. |          | The PPP contract should identify changes in the law that require compensation by the government and those that do not require compensation; changes in the law that benefit the private partner should also be considered. | Compensation by the government, or even the need to buy the assets or assume debt; change in law may also require the private partner to compensate the government |                                  | Proper evaluation of the efficiency of legislation and public policies. |                     |
|                     |                                                                                                        |                                                                                                          |          |                                                                                                                                                                                                                            |                                                                                                                                                                    |                                  |                                                                         |                     |
| 9                   | REBALANCING OF CONTRACT FINANCIAL EQUILIBRIUM                                                          |                                                                                                          |          |                                                                                                                                                                                                                            |                                                                                                                                                                    |                                  |                                                                         |                     |
| 9.1                 | Does the legal framework or contract provide for a mechanism of re-balancing financial equilibrium?    |                                                                                                          |          |                                                                                                                                                                                                                            |                                                                                                                                                                    |                                  |                                                                         |                     |
|                     | No risks from the legal framework or contract requiring reinstatement of financial equilibrium         |                                                                                                          |          |                                                                                                                                                                                                                            |                                                                                                                                                                    |                                  |                                                                         |                     |
|                     | No risks identified                                                                                    |                                                                                                          | IF<br>NO |                                                                                                                                                                                                                            |                                                                                                                                                                    |                                  |                                                                         |                     |
|                     | There are risks from the legal framework or contract requiring reinstatement of financial equilibrium. |                                                                                                          |          |                                                                                                                                                                                                                            |                                                                                                                                                                    |                                  |                                                                         |                     |

| RISK IDENTIFICATION |                                                                                 |                                                                                                                                          |           | LIKELIHOOD | FISCAL IMPACT                                                    | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                            | PRIORITY<br>ACTIONS |
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|                     | RISK                                                                            | The government is paying compensation and/or terminating the contract due to the requirement to reinstate financial equilibrium.         | IF<br>YES |            | The government is paying compensation or cancelling the project. |                                  | If prescribed in the legal framework, the PPP contract should restrict its application to the cases of force majeure, MAGA, avoiding its application to a wider range of situations. |                     |
|                     |                                                                                 |                                                                                                                                          |           |            |                                                                  |                                  |                                                                                                                                                                                      |                     |
| 9.2                 | Does the contract provide for any kind of rate-of-return guarantee?             |                                                                                                                                          |           |            |                                                                  |                                  |                                                                                                                                                                                      |                     |
|                     | No risks from the contract guaranteeing a rate of return to the private partner |                                                                                                                                          |           |            |                                                                  |                                  |                                                                                                                                                                                      |                     |
|                     | No risks identified                                                             |                                                                                                                                          | IF<br>NO  |            |                                                                  |                                  |                                                                                                                                                                                      |                     |
|                     | The contract guarantees a rate of return to the private partner.                |                                                                                                                                          |           |            |                                                                  |                                  |                                                                                                                                                                                      |                     |
|                     | RISK                                                                            | The government is paying compensation and/or terminating the contract due to the contract guaranteeing a rate of return for the private. | IF<br>YES |            | The government is paying compensation or cancelling the project. |                                  | Avoiding clauses and expectations, on a guaranteed level of project rate of return, or shareholder's rate of return.                                                                 |                     |
|                     |                                                                                 |                                                                                                                                          |           |            |                                                                  |                                  |                                                                                                                                                                                      |                     |
| 9.3                 | Does the contract include hardship clauses?                                     |                                                                                                                                          |           |            |                                                                  |                                  |                                                                                                                                                                                      |                     |

| RISK IDENTIFICATION |                                                           |                                                                                                                           | LIKELIHOOD | FISCAL IMPACT | RISK RATING<br>Likelihood*Impact                                                                                                                                                                                              | MITIGATION<br>STRATEGY<br>Is it in place? | PRIORITY<br>ACTIONS                                                                                                                                                                                        |
|---------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | No risks from the contract including hardship clauses     |                                                                                                                           |            |               |                                                                                                                                                                                                                               |                                           |                                                                                                                                                                                                            |
|                     | No risks identified                                       |                                                                                                                           | IF<br>NO   |               |                                                                                                                                                                                                                               |                                           |                                                                                                                                                                                                            |
|                     | The contract includes hardship clauses.                   |                                                                                                                           |            |               |                                                                                                                                                                                                                               |                                           |                                                                                                                                                                                                            |
|                     | RISK                                                      | The government is paying compensation and/or terminating the contract due to excessive protection against some hardships. | IF<br>YES  |               | The government is paying compensation or cancelling the project.                                                                                                                                                              |                                           | Hardship clauses, if needed, should be very precise and strict. Alternative methods to reduce excessive private sector risks should be considered: insurance, future markets, and other hedging mechanism. |
|                     |                                                           |                                                                                                                           |            |               |                                                                                                                                                                                                                               |                                           |                                                                                                                                                                                                            |
| 10                  | RENEGOTIATION                                             |                                                                                                                           |            |               |                                                                                                                                                                                                                               |                                           |                                                                                                                                                                                                            |
| 10.1                | Is the renegotiation of the contract a legal possibility? |                                                                                                                           |            |               |                                                                                                                                                                                                                               |                                           |                                                                                                                                                                                                            |
|                     | RISK                                                      | Opening an uncontrolled renegotiation process, under information asymmetry and no competitive pressure                    | IF<br>YES  |               | Opening a Pandora's Box, jeopardises economic efficiency, by allowing the private to transfer to the government costs and risk that had originally been accepted by the private partner. The fiscal impact will depend on the |                                           | Having a strategic view of PPP contract management and creating the capacity to renegotiate is paramount.                                                                                                  |



| RISK IDENTIFICATION |                                                                                            |                                                                                                  |           | LIKELIHOOD | FISCAL IMPACT                                                                                                                                               | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                           | PRIORITY<br>ACTIONS |
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|                     |                                                                                            |                                                                                                  |           |            | government's ability to manage the renegotiation process.                                                                                                   |                                  |                                                                                                                                     |                     |
|                     |                                                                                            |                                                                                                  |           |            |                                                                                                                                                             |                                  |                                                                                                                                     |                     |
| 11                  | CONTRACT TERMINATION                                                                       |                                                                                                  |           |            |                                                                                                                                                             |                                  |                                                                                                                                     |                     |
| 11.1                | Does the contract clearly define the reasons for early termination and their consequences? |                                                                                                  |           |            |                                                                                                                                                             |                                  |                                                                                                                                     |                     |
|                     | The contract clearly defines the reasons and consequences for early termination.           |                                                                                                  |           |            |                                                                                                                                                             |                                  |                                                                                                                                     |                     |
|                     | No risks identified                                                                        |                                                                                                  | IF<br>YES |            |                                                                                                                                                             |                                  |                                                                                                                                     |                     |
|                     | The contract does not clearly define the reasons and consequences for early termination.   |                                                                                                  |           |            |                                                                                                                                                             |                                  |                                                                                                                                     |                     |
|                     | RISK                                                                                       | Entering an early termination process without clear knowledge of its consequences and procedures | IF<br>NO  |            | Lack of clarity on causes vis-a-vis consequences of early termination increases the private partner's bargaining power, leading to increases in the cost of |                                  | Contracts should include a clear definition of the reasons for early termination (e.g. under-performance of private partner, public |                     |

| RISK IDENTIFICATION |                                                                                                                         |  |           | LIKELIHOOD | FISCAL IMPACT                                                                                                                                                                                                               | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                                                                                                | PRIORITY<br>ACTIONS |
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|                     |                                                                                                                         |  |           |            | termination; it can also prevent the government from cancelling non-performing contracts, or generate incentives for governments to nationalize a project or assets without proper assessment of the cost of that decision. |                                  | interest, force majeure) and present its consequences, in terms of transfer of assets and responsibilities, namely financial compensation for capital investment; compensation should vary according to the party responsible for the early termination. |                     |
|                     |                                                                                                                         |  |           |            |                                                                                                                                                                                                                             |                                  |                                                                                                                                                                                                                                                          |                     |
| 11.2                | Does the contract clearly define procedures for the transfer of assets and responsibilities at the end of the contract? |  |           |            |                                                                                                                                                                                                                             |                                  |                                                                                                                                                                                                                                                          |                     |
|                     | The contract clearly defines procedures for transferring assets and responsibilities.                                   |  |           |            |                                                                                                                                                                                                                             |                                  |                                                                                                                                                                                                                                                          |                     |
|                     | No risks identified                                                                                                     |  | IF<br>YES |            |                                                                                                                                                                                                                             |                                  |                                                                                                                                                                                                                                                          |                     |
|                     | The contract does not clearly define procedures for transferring assets and responsibilities.                           |  |           |            |                                                                                                                                                                                                                             |                                  |                                                                                                                                                                                                                                                          |                     |

| RISK IDENTIFICATION |      |                                                                                                                |          | LIKELIHOOD | FISCAL IMPACT                                                                                                                                                                                                                   | RISK RATING<br>Likelihood*Impact | MITIGATION<br>STRATEGY<br>Is it in place?                                                                                                                                                                                       | PRIORITY<br>ACTIONS |
|---------------------|------|----------------------------------------------------------------------------------------------------------------|----------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                     | RISK | Terminating the contract without a clear understanding of transfer processes, including financial consequences | IF<br>NO |            | The government may need to pay for a stock of inputs or outputs. Human resources issues may imply financial compensation or increased current expenditures. Licenses needed to continue operations may create fiscal surprises. |                                  | Contracts should include a clear definition of the termination process and all its financial consequences. Identified gaps in the contract should be solved by having both parties sign transfer protocols detailing the rules. |                     |
|                     |      |                                                                                                                |          |            |                                                                                                                                                                                                                                 |                                  |                                                                                                                                                                                                                                 |                     |