GUIDEBOOK
ON
PUBLIC-PRIVATE PARTNERSHIPS CONTRACTS

General Department of Public-Private Partnerships

2024

FOREWORD

It gives me great pleasure to introduce the Guidebook on Public-Private Partnerships Contracts, which is a comprehensive resource prepared to assist the Ministry of Economy and Finance (MEF) and Implementing Agencies (IAs) in the development of Public-Private Partnerships (PPP) Contracts.

As Cambodia forges ahead with its ambitious agenda to create a resilient economy that is efficient, competitive, open, inclusive, and sustainable, the development of new infrastructure through PPPs will be important in driving sustainable economic growth, enhancing service delivery, and improving the lives of our people. This potent sector development is a part of the Pentagonal Strategy, which is the Government of the Kingdom of Cambodia (GKC)'s strategic plan for the next 25 years, that focuses on the development of private sector and employment through the strengthening of PPPs. For instance, the strategy highlights the "formulation of mechanism to inspect and monitor the implementation of public and private obligations in accordance with the PPP agreements and legal instruments in force."

Cambodia's new Law on PPPs and the associated Standard Operating Procedures (SOPs) establish a robust regulatory framework supporting collaboration between the public and private sectors. The Guidebook on PPP Contracts will play an important role in equipping officials with the necessary knowledge and guidance to effectively plan, procure, and manage PPP Contracts. It reflects Cambodia's legal and regulatory framework along with the best aspects of relevant international experience.

The Guidebook on PPP Contracts offers a practical toolkit for managing the commercial issues that arise in PPP contracts. It includes information on matters including bankability, PPP revenue structures, force majeure and default and termination via clear guidance, practical examples and case studies.

The development of this Guidebook has been made possible through the valued support of Partnerships for Infrastructure (P4I), an Australian Government program that has been working closely with the GKC and MEF. Their commitment to building our capacity in PPP delivery and management has been instrumental in developing the necessary tools and expertise to successfully undertake projects as PPPs.

I would like to acknowledge the MEF and P4I teams who have dedicated their time and expertise to the creation of this Guidebook. Their insights, drawn from a diverse range of disciplines and experiences, have enriched the material and created a valuable resource to complement the Law on PPPs and the SOPs.

As we embrace the potential of PPPs to transform our nation, I encourage all government officials to utilise this Guidebook. Let us draw on its insights and recommendations to ensure the efficient and effective implementation of PPP projects that will drive our infrastructure agenda forward and foster economic and social development.

Dr. AUN Pornmoniroth
Deputy Prime Minister
Minister of Economy and Finance

ABBREVIATIONS

ADB	Asian Development Bank
AFC	Asian Financial Crisis
AUD	Australian Dollar
BCFM	Base Case Financial Model
BOT	Build Operate Transfer
COVID	Novel Coronavirus
CMC	Contract Management Committee
CRA	Climate Risk Assessment
DBFM	Design, Build, Finance, and Manage
DGE	Delhi Gurgaon Expressway
DTF	Department of Treasury and Finance
EOT	Extension of Time
EPC	Engineering, Procurement, and Construction
EWC	East West Connect
FPSL	Fazakerley Prison Services Limited
GBP	Great British Pounds
GDPPP	General Department of Public-Private Partnerships
GDR	General Department of Resettlement
GEDSI	Gender Equality, Disability and Social Inclusion
GKC	Government of the Kingdom of Cambodia
GSM	Government Support Measures
IA	Implementing Agencies
IC	Independent Consultant
INR	Indian Rupee
KPIs	Key Performance Indicators
LRMC	Light Rail Manila Corporation
MCA	Multi-Criteria Analysis
MEF	Ministry of Economy and Finance
MOU	Memorandum of Understanding
MPSS	Minimum Performance Standards and Specifications
NHAI	National Highway Authority of India
NSW	New South Wales
O&M	Operations and Maintenance
P&L	Profit and Loss

P4I	Partnerships for Infrastructure
PFI	Private Finance Initiative
PMU	Project Management Unit
PPP	Public-Private Partnerships
PRI	Political Risk Insurance
Q&A	Question and Answer
QSP	Quarterly Service Payments
RTA	Roads and Traffic Authority
SEAH	Sexual Exploitation, Assault and Harassment
SoPC	Standardisation of PF2 Contracts
SOPs	Standard Operating Procedures
SPC	Special Purpose Company
SPV	Special Purpose Vehicle
TA	Transaction Advisor
TfNSW	Transport for New South Wales
TOD	Transit-oriented Development
UK	United Kingdom
VAGO	Victorian Auditor-General's Office
VfM	Value for Money
VGF	Viability Gap Financing
WHO	World Health Organisation

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Guidebook on PPP Contracts is a comprehensive resource developed to support the Ministry of Economy and Finance (MEF) and Implementing Agencies (IAs) in Cambodia. It aims to enhance the development, procurement, and management of Public-Private Partnership (PPP) Contracts, reflecting Cambodia's legal framework and international best practices.

The primary objectives of the Guidebook are to promote sustainable economic growth by leveraging PPPs to drive economic development, enhance service delivery, and improve public infrastructure. It seeks to strengthen legal and institutional frameworks by aligning with Cambodia's Law on PPPs and Standard Operating Procedures (SOPs), offering robust regulatory support for PPP initiatives. Additionally, the Guidebook aims to enhance capacity building by providing detailed guidance and examples, equipping officials with the knowledge to handle commercial issues in PPP contracts effectively.

The Guidebook covers a wide range of topics essential for effective PPP contract management. It evaluates project bankability to determine the project's ability to attract financing, discusses various revenue structures and key considerations, and explores government support measures such as guarantees and viability gap financing to ensure financial feasibility. It also outlines considerations for site and land allocation, highlights the role of independent consultants in project monitoring and compliance, and provides guidelines for managing project delays. Furthermore, the Guidebook details processes for contract variations and relief, sets out mechanisms for dispute resolution, describes procedures for asset handback and termination at the end of the contract, and discusses the importance of a robust financial model during project preparation and execution.

The Guidebook integrates Cambodian legal requirements with international precedents from countries such as Australia, the UK, and the Philippines. It provides practical tools, clear guidance, and case studies to navigate the complexities of PPP contracts.

The Guidebook on PPP Contracts is a vital tool for MEF and IAs, fostering a conducive environment for PPP projects that support Cambodia's infrastructure agenda and economic development goals. It represents a collaborative effort with valuable support from the Australian Government's Partnerships for Infrastructure (P4I) program, ensuring that Cambodian officials are well-prepared to implement effective and sustainable PPP projects.

This Guidebook serves as an essential reference to ensure that PPP projects are managed efficiently, aligning with both national policies and international best practices.

For further details and guidance, the General Department of Public-Private Partnerships (GDPPP) at MEF can be contacted.

I. INTRODUCTION

1. Introduction

1.1. Having successfully enacted the Law, and adopted associated Standard Operating Procedures (SOPs), the attention of the Government of the Kingdom of Cambodia (GKC) is firmly focused on the Law's implementation. This involves identifying, developing and procuring suitable projects as Public-Private Partnerships (PPPs), but also developing appropriate institutional arrangements and the ability of officials to design and implement the necessary complex commercial arrangements.

1.2. The Ministry of Economy and Finance (MEF) plays a key role in the development of infrastructure in Cambodia. It is responsible for the administration of the Law and the provision of guidance to the Implementing Agencies (IAs) responsible for the delivery of specific projects.

1.3. MEF has already undertaken several important steps to build the capacity needed to successfully implement PPPs in Cambodia, including:

- Establishing a General Department of Public-Private Partnerships (GDPPP) within the MEF, responsible for leading and managing PPPs across government, with sub-departments for (i) Project Development, (ii) Project Delivery and Portfolio Management, and (iii) General Affairs.
- Developing and implementing a new capacity building program, updating and building on previous work in capacity building undertaken in 2017 for officials within the MEF and the IAs.

1.4. Partnerships for Infrastructure (P4I), an initiative of the Australian Department of Foreign Affairs and Trade, supported by consultancy firms, EY, Adam Smith, Ninti One and others, has been engaged by the MEF to provide technical advice and support to the capacity building initiatives it is undertaking. That support takes the form of two complementary activities:

- The development of this Guidebook on key commercial issues that commonly arise in developing PPP Contracts.
- The development and delivery of a Capability Building Program developed specifically for the MEF and relevant IA officials to support a foundational understanding of PPP development, procurement and management in the Cambodian context.

1.4.1. This Guidebook should be read in conjunction with the Capability Building materials and applicable laws and regulations.

2. Objective of the Guidebook

2.1. This Guidebook aims to provide a reference for the IAs on commercial issues relevant to PPP Contracts, under the Law on PPPs, the Sub-Decree on promulgating the SOPs for PPP projects and the Prakas on promulgating the Guidelines on Fiscal Management of PPP projects. This analysis is supported by insight into the approaches adopted in other jurisdictions, particularly Australia, in order to align the guidance to the international practice. Over the longer term, and in conjunction with the training conducted under the Capability Building Program, this is intended to enable a functioning and robust PPP sector in Cambodia, supporting high quality infrastructure development and attracting more private investment.

3. Structure of the Guidebook

Section	Section Title	Description
I	Introduction	Sets out the context and purpose, structure adopted, methodology and approach, and limitations of this Guidebook.
II	Project Bankability	Sets out considerations for evaluating the ability of the Project to attract financing.
III	Revenue Structures	Sets out the types of revenue structure used in PPP Contracts and key considerations associated with them.
IV	Government Guarantees and Viability Gap Financing	Sets out the two principal forms of Government Support Measures (GSM), government guarantees and viability gap financing (VGF), that can be provided by the Government to ensure the financial feasibility and timely execution of PPP Projects.
V	Site	Sets out the key considerations, rights, security interests and costs of land and site allocation in PPP Projects.
VI	Independent Consultant	Sets out the purpose, role and key considerations of the Independent Consultant (IC) in PPP Projects.
VII	Delay	Sets out the process and key considerations should the PPP Project encounter a delay event.
VIII	Refinancing	Sets out the process under which the lenders and/or lending terms are adjusted to allow the Private Partner to secure new funding arrangements to improve the projects' financial structure.
IX	Change in Law	Sets out the approach to managing the implications of a change in law that impacts on a PPP Project.
X	Variations	Sets out the process and considerations when the parties wish to vary the PPP Contract.
XI	Relief and Compensation	Sets out forms of relief and compensation to address various adverse events that may arise during the term of the PPP Contract.
XII	Force Majeure	Sets out the approach to managing natural disasters and other major events under the PPP Contract.

XIII	Dispute Resolution	Sets out the mechanisms and considerations that apply when the Private Partner and the IA enter into a dispute.
XIV	State Step-in Rights	Sets out the circumstances and obligations in a situation where the Private Partner is unable to fulfil its obligations, and the Government steps in to take over the project.
XV	Lenders Step-in Rights	Sets out the process of the lenders to a PPP stepping in to manage the project in certain circumstances.
XVI	Termination of PPP Contract	Sets out the process and key issues when there is a need to terminate a PPP Contract.
XVII	Asset Handback	Sets out the process and key PPP Contract considerations when transferring assets from the Private Partner back to the Government.
XVIII	Financial Model	Sets out the key components required of a financial model during the project preparation phase and the use of a Base Case Financial Model (BCFM), including differences between financial modelling requirements for solicited and unsolicited proposals.
Appendix	Bibliography	Sets out the resources which were used in the production of this Guidebook.

4. Methodology and Approach

4.1. Each section of this Guidebook addresses a discrete commercial issue that may be encountered during the lifecycle of a PPP Contract. In each case there is a discussion of the relevant Cambodian legal and regulatory frameworks, as expressed in the Law, Sub-Decree and Prakas. These sources have been used as the primary basis for drafting a guidance material.

4.2. This material has been supplemented in relevant areas with international precedents from Australia, Ireland, the United Kingdom (UK), the Netherlands, the Philippines and the World Bank. In particular, the Guidebook draws on the Standard Project Deeds and other guidance documents published by Partnerships Victoria, a team in the Department of Treasury and Finance of Victoria, Australia which provides policy oversight over development, procurement and delivery of PPP projects in that jurisdiction.[1] This international material provides useful further detail on practices in other markets, but is not intended to provide mandatory standards and should not be followed if doing so would conflict with Cambodia's own regulatory requirements.

5. Limitations

5.1. This Guidebook is based on the Law on PPPs as of November 2021, SOPs as of August 2022, guidelines as of October 2022 and 2023 as well as discussions with GKC personnel. The scope of analysis has been limited in scope and time and is subject to change. Some elements of the SOPs and Prakas were in draft as at this date, and final revisions may alter the outcomes of the analysis presented in this Guidebook.

[1] Partnerships Victoria, Requirements policy and guidance, standard deed and tender templates

5.2. The Law, Sub-Decree and Prakas should be taken as authoritative in the event of any conflict with the material presented in this Guidebook.

5.3. PPPs are complex commercial arrangements and can differ greatly from project to project. This Guidebook is necessarily of a general nature. It is highly advisable to seek the advice of an appropriately qualified Technical Advisor and/or legal advisor to address commercial and/or legal issues relating to a particular project, as contemplated under the SOPs. Nothing in this Guidebook has the status of legal advice.

II. PROJECT BANKABILITY

1. Overview

1.1. Public-Private Partnerships (PPPs) typically raise a large proportion of their capital from third-party lenders to finance construction. Projects in developing economies tend to have debt-to-equity ratios of 70% to 80%.

1.2. Senior debt finance is typically secured against the PPP Project's assets and the revenue those assets are forecast to generate, whether that revenue is sourced directly from users or via agreed government payments. Financiers typically have no or limited recourse against the Private Partner beyond the equity invested into the project (i.e., the Private Partner cannot be required to commit more resources to the project to make up losses than they have contractually agreed to provide). Therefore, the only security for financiers is the quality of the assets and the expected future cash flows, and they undertake rigorous due diligence before financing projects.

1.3. The bankability of a PPP Project is the degree of willingness of prospective lenders to finance the project. Higher bankability provides access to:

- Higher amounts of debt (leverage), and/or
- Better financing terms (i.e., longer tenor, lower cost, easier conditions, etc.).

1.4. From an IA's perspective, the bankability of a PPP Project is key to whether or it can be procured through a PPP model. Accordingly, this section sets out some key considerations relating to project bankability, although this is an issue that is evaluated by financiers for a project as a whole, and (unlike the other sections) does not refer to a specific matter addressed in the PPP Contract. These key considerations include:

- Project financial structure.
- Financial viability and GSM.
- The socio-political environment.
- The legal and regulatory environment.
- Technical project details.
- The contract documents.
- Inclusion considerations.
- Disaster risk reduction and climate change considerations.
- Miscellaneous considerations.

1.5. A Transaction Advisor (TA) will typically engage with prospective bidders and lenders on behalf of an IA during the early stages of project development to determine the appetite for the country- and region-specific risks (e.g., depth of currency markets, quality of institutions) and project-specific risks (e.g., geotechnical considerations, access constraints, interfaces). The market feedback obtained informs the development and procurement of the PPP Project in a manner designed to generate interest from private bidders.

1.6. The SOP for PPP Projects Volume I: Policies and Procedures regulates the procedure for assessing bankability. In particular, IAs should consider market bankability as part of the initial Project Concept Note, which informs the Multi-Criteria Analysis (MCA) conducted during the Project Identification and Selection phase. This initial assessment may take the form of 'desktop' research, but it should be updated with the results of direct market consultation during the preparation of the Pre-Feasibility and/or Feasibility Study.

1.7. Lenders' due diligence requirements and lending conditions are sometimes considered a disadvantage by IAs when seeking private finance for infrastructure. However, the thoroughness and attention to detail that lenders bring to projects can contribute to making them more feasible and secure. On the other hand, if a project cannot secure the necessary financing, it may indicate potential defects that need further consideration before proceeding. Therefore, the participation of lenders in projects is generally regarded as a key benefit of adopting the PPP model, despite some of the challenges that may occasionally arise.

1.8. It should be noted that IAs are at a relative disadvantage in discussing bankability issues with proponents, who generally have more in-depth experience and direct contact with lenders. Proponents' views should therefore be considered. On the other hand, bankability is sometimes used by proponents as a justification for commercial positions that they would not feel comfortable advancing as their own requirements. Ultimately, as an equal negotiating party, the IA should arrive at its own assessment of whether a given approach is bankable, informed by its own analysis (particularly from a materiality perspective), market experience and precedent (including, where necessary, overseas precedent) and input from the TA.

1.9. Key elements for the bankability assessment are discussed in detail and should be read in conjunction with the SOPs for PPP Projects Volume I: Policies and Procedures and SOPs for PPP Projects Volume II: Guidelines on GSM.

2. Project Financial Structure

2.1. Lenders evaluate the project finance structure of a PPP project based on:

- **The terms of the proposed financing**, including the level of debt, tenor, repayment profile, interest rates, payment conditions and detailed provisions of the lending agreements. There may be special conditions to protect lenders, such as:
  - Requiring that equity be at least partially or fully contributed and/or committed as a condition precedent to drawing on loans.
  - Step-in rights (see Section XV (Lenders Step-in Rights)).
  - Security over the project's assets or over the shares of the project company.
- **The quality of the project's cash flows as security for the loan**: whether the project cash flows are adequate to service debt obligation (principal and interest) with an appropriate safety margin to cover the possibility of lower-than-expected performance. The Private Partner's financial model is usually closely scrutinized with a particular focus on downside scenarios (see Section XVIII (Financial Model)).
- **Sponsor and equity contribution risk:** whether the Private Partner has adequate financial resources and technical expertise to implement the PPP Project. Lenders usually conduct detailed due diligence on the Private Partner based on its track record of delivering similar projects, financial history and, in many cases, the skills and experience of the Private Partner's key staff.

- **The creditworthiness of all the project counterparties:** whether all the project counterparties, including the Engineering, Procurement and Construction (EPC) contractors, Operations and Maintenance (O&M) contractors, key component suppliers, etc., have the technical and financial capabilities to deliver the project. The IA will also be assessed by lenders as the Government party to the PPP Contract.

3. Financial Viability and Government Support Measures

3.1. If a project is not financially viable, this will impact its ability to attract both debt and equity financing. Government support, via investment incentives, guarantees or direct fiscal commitments, including land, availability payments or Viability Gap Financing, may therefore play a critical role in bankability by making otherwise unviable projects viable.

3.2. Under the SOP for PPP Projects Volume I: Policies and Procedures, the full feasibility study will determine whether:

- Proposed PPP Arrangements are bankable (i.e., the Project is able to attract investors and lenders to finance the investment costs of the Project).
- The Project is commercially and financially viable (i.e., the Project is able to generate sufficient revenues to cover investment costs and to provide an adequate return to investors).

3.3. The assessment of the requirement for any GSM will be undertaken by the General Department of PPP (GDPPP) in accordance with the SOP for PPP Projects Volume II: Guidelines on GSM, noting that GSM is not available for unsolicited projects.

4. The Socio-Economic and Political Environment

4.1. Lenders evaluate the economic and political environment of the host country based on:

4.1.1. **Socio-Economic Factors**

4.1.1.1. Socio-economic factors are the social and economic characteristics which may influence the likelihood and consequence of various risks that may impact the project. Considerations may include:

- Labour force indicators (e.g., education level): for the availability of high-skilled labour.
- Project affordability: the ability of a government or public users to pay for the PPP asset or service.
- Environmental and social impact: environmental and social safeguarding and promoting equitable socio-economic outcomes.
- Overall public sentiment towards project development: for risk of any discontent amongst local communities, which might manifest, for example, as industrial action, a constraint on access or land availability.

4.1.2. **Political Factors**

4.1.2.1. Political factors are the risks of an adverse political event that may affect the PPP Project. Bidders typically cannot control or manage political risk, such as the risk of uncompensated (or under-compensated) termination or expropriation, and generally have a limited appetite to bear it. The best approach for governments is to establish a reputation for stable arrangements in which contracts are honored regardless of the political situation. If proponents are not confident that this is the case, they generally respond by prioritizing other markets with more stable political and legal arrangements and/or by increasing the cost of their bids to compensate for the risks.

4.1.2.2. Lenders may demand political risk insurance (PRI) provided by commercial insurance companies or multilateral or export credit agencies (e.g., Multilateral Investment Guarantee Agency). The cost of PRI is typically high and inflates the project's total cost.

4.1.2.3. Some lenders may draw comfort from a memorandum of understanding (MOU) or guarantees supplied by the host country government or the involvement of development financial institutions.

4.1.2.4. Article 13 of the PPP Law makes provision for the Government to grant sovereign or political risk guarantees in the future. Currently, however, under the SOP for PPP Projects Volume II: Guidelines on GSM, such support is not available.

4.1.3. **Exchange Rate Volatility**

4.1.3.1. Exchange rate risk can arise when there is a mismatch within a project between cash flows in different currencies (e.g., when revenues are in the local currency and debt service payments are in foreign currency). This is particularly an issue where there is a lack of liquidity in local currency markets.

4.1.3.2. Different approaches for managing foreign exchange rate risk have been adopted across different markets. Developing country governments sometimes retain long-term exchange rate risk to protect Private Partners from exchange rate volatility.

4.1.3.3. Any currency risks the project company bears is typically hedged through currency swaps or forward contracts provided by commercial banks. The hedging cost is priced into the bid.

4.1.4. **Interest Rate Volatility**

4.1.4.1. The risk associated with interest rate fluctuations over the project's lifecycle, causing interest payments to be higher than initially forecasted. Interest rate risk generally sits with the Private Partner.

4.1.4.2. The Private Partner will hedge all or majority of interest rates via interest rate hedging arrangements at the financial close. The hedging cost is reflected in the bid price. For any residual interest rate risk, lenders confirm the ability of the project to sustain adverse interest rate fluctuation scenarios.

4.1.5. **Inflation Risk**

4.1.5.1. Inflation risk is the risk of higher-than-expected increases in construction and operations costs relative to revenues, resulting in lower profitability for the project company.

4.1.5.2. Inflation risk may be borne in part or full by the IA by allowing provision for escalation or indexation (using a price multiple index) in the calculation of availability payment or user fees (refer to Section III (Revenue Structures) for additional details on payment mechanisms).

4.1.5.3. The Private Partner should aim to mitigate any residual risk by passing the risk of cost mismatch due to actual inflation and contractually limited escalation to the sub-contractors. Sub-contractors will price this risk accordingly, and the cost to the Government will remain unchanged.

5. The Legal and Regulatory Environment

5.1. Lenders conduct detailed due diligence of the legal and regulatory environment of the host country (both in its current form and also with a view to how it may develop) to evaluate:

- Enabling environment: whether laws and regulations (e.g., labour law, environment law, insolvency law, PPP law, etc.) could prevent or reduce the success of the proposed PPP Project.
- Tax regime: whether the tax regime is stable and predictable.
- Enforceability: whether contractual rights are going to be enforceable on a neutral/unbiased and predictable basis through the court system.

5.2. Different approaches have been adopted towards the allocation of risk for change in law that may affect the PPP Project (e.g., issues in tariff revision as per the agreed terms in the PPP Contract). The IA may absorb a portion of the risk of change in law to improve the project's bankability (refer to Section IX (Change in Law) for additional details on handling changes in law).

6. Technical Project Details

6.1. Lenders usually appoint independent experts to assess the technical feasibility of the proposed PPP Project and to ensure that risks have been appropriately mitigated. Some project-specific technical considerations include:

6.1.1. Demand and Price Risk

6.1.1.1. Demand and price risk is the exposure of the PPP company to reduced revenue if customer demand or revenue per customer is lower than anticipated. This is a key exposure for all projects where a government does not pay or guarantee the revenue.

6.1.1.2. In some cases, lenders have been unwilling to accept demand risk and governments have had to change strategy to provide additional support to attract finance.

6.1.1.3. In other cases, the depth and quality of demand and revenue forecasts can have a material impact on whether lenders will accept demand risk. Lenders may also want to understand how demand and revenue forecasts address the constraints that may be faced by various public infrastructure users, including women, people with disabilities and people on low incomes.

6.1.2. Site Acquisition and Access

6.1.2.1. Often, projects may require land to be resumed or transferred from private or public interests, which may involve significant or challenging stakeholder management, particularly where relocation of settlements is required or where the works impact neighbouring properties. These are some of the most common constraints on project delivery and, therefore, a particular area of concern for PPP Projects (see Section VII (Delay)).

6.1.2.2. A lack of women's representation in decision-making and land entitlement can widen existing gender gaps if not addressed as part of a community engagement strategy.

6.1.3. Construction Strategy

6.1.3.1. Construction strategy include risks and mitigations associated with potential delays in construction works (see Section VII (Delay)), adverse movements in prices of key components, or any failure to manage physical or stakeholder interfaces.

6.1.3.2. Lenders will consider the construction contracting strategy, particularly the strength of protections for the PPP Company (e.g., liquidated damages) for these risks.

6.1.3.3. Other potential risks include violation of human rights such as labour exploitation (forced labour, debt bondage, child labour) and sexual exploitation, assault and harassment (SEAH) during construction on site and/or in the communities impacted by construction. Any risks that are not fully transferred or mitigated will be evaluated for their potential impacts on the project.

6.1.4. **Operations and Maintenance Strategy**

6.1.4.1. The risks and mitigations associated with a disruption in operations, sub-standard performance of the asset or service, obsolescence of equipment or materials used, or unexpected escalations in operating costs.

6.1.4.2. Lenders typically appoint experienced advisors to undertake thorough due diligence on the project’s design and the track record of key equipment. If the O&M is outsourced to a specialist O&M provider, the terms of the contract and the capability of the O&M provider will also be important considerations. As for construction risks, any risks that are not fully transferred or mitigated will be evaluated for their potential impacts on the project.

6.1.4.3. Lenders may also want to ensure that the O&M strategy incorporates Gender Equality, Disability and Social Inclusion (GEDSI) considerations to mitigate identified social risks and promote opportunities.

6.1.5. **Approvals, Licenses and Permits**

6.1.5.1. These can represent a key risk if they are not yet certain of being granted, and lenders will want to understand the allocation of who is responsible for addressing these issues, any risks to successfully acquiring needed approvals and the timing for doing so. The risk is sufficiently significant that, in some markets, PPPs have been supported by government action to streamline approvals processes.

7. The Contract Documents

7.1. Lenders closely scrutinize the PPP Contract between the IA and the Private Partner, as it is a key determinant of the risks of lending. The detail and specific drafting of many of the terms will be relevant, including Section VII (Delay), Section XVI (Termination of PPP Contract), Section XII (Force Majeure), Section XIV (State Step-in Rights), Section X (Variations) and Section VI (Independent Consultant).

7.2. The tripartite agreement between the IA, the Private Partner and the lenders also sets out important rights between the parties, including the scope for lenders to act before default and termination provisions in the PPP Contract are used (see Section XV (Lenders Step-in Rights)).

8. Inclusion Considerations

8.1. GEDSI factors are increasingly considered by lenders when developing finance packages for major infrastructure projects. GEDSI matters may include a project’s potential to enhance social outcomes, including for women and marginalised societal groups. Accordingly, during the preparation of Pre-Feasibility Studies and

Feasibility Studies, and during procurement, IAs may wish to consider having their TA perform relevant analysis in support of lender due diligence on the PPP's finance package.

8.2. Lender due diligence may seek to satisfy that:

- Social safeguarding and promotion of equitable socio-economic outcomes have been taken into account during project development.
- Demand and revenue forecasts have accounted for different constraints faced by various public infrastructure users, including women, people with disabilities and those from low-income categories.
- Women have been represented in stakeholder consultation, particularly where land resumption is required.
- Other potential risks, including violations of human rights such as labour exploitation (forced labour, debt bondage, child labour) and sexual exploitation, abuse or harassment during construction and operations, have been identified and eliminated (or at least mitigated).

9. Disaster Risk Reduction and Climate Change Considerations

9.1. Projects featuring 'climate resilience' elements may attract concessional finance from certain institutions, including multilateral development banks such as the World Bank or Asian Development Bank (ADB), or funds such as the Green Climate Fund.

9.2. The availability of concessional finance may improve the affordability of a project for the IA as part of an overall finance package. The availability of concessional finance may also improve the project's bankability for non-concessional financiers, particularly if revenue risk is transferred to the Private Partner.

9.3. Some examples of the kinds of technical solutions that may attract concessional finance include:

- Climate-resilient road design takes expected climate change impacts into account. Bridge heights may be increased or additional drainage beyond 'typical' requirements may be adopted, along with the use of more environmentally friendly and/or resilient materials.[2]
- The Dakar Bus Rapid Transport PPP, presently under development, is an 18-kilometre electric bus corridor through metropolitan Dakar in Senegal, to be operated under a 15-year concession term. Climate resilient engineering, including extensive drainage and civil works to mitigate the potential impact of flooding induced by climate change, was considered sufficient to meet the thresholds for concessional finance, improving overall affordability.

10. Miscellaneous Considerations

10.1. The interests of lenders are closely tied to the project's overall success, and they are, therefore, potentially interested in any matter that can arise in the course of seeking financing. Such considerations cannot be exhaustively listed as they can differ from project to project. Examples include:

- The coverage provided under the proposed insurances.

---

[2] OECD, 2018, Climate Resilient Infrastructure

- The specific terms of abatement provisions that can reduce support payments from the IA.
- The nature of guarantees provided by manufacturers for key equipment and how those guarantees may change over time.
- Any rights by the Government to direct the use of the asset for non-commercial purposes.

10.2. In short, the procurement of projects and the proposed terms offered by IAs should be regularly assessed for their potential impact on financing as they are developed, with a focus on whether lenders' interests and appetite to lend may be positively or negatively impacted.

11. Guiding Principles

11.1. Project bankability is fundamental to whether or a project can be procured through a PPP model. The due diligence carried out by private financiers to determine bankability can improve the robustness and market readiness of a project, and accordingly, IAs should seek to understand how private finance approaches bankability assessment.

11.2. IAs may wish to consider the following:

- The SOP for PPP Projects Volume I: Policies and Procedures regulates the procedure for assessing bankability. IAs should consider market bankability as part of the initial Project Concept Note and update their assessment of bankability during the Pre-Feasibility and Feasibility Study preparation, with the support of a TA. During the latter stages of project preparation, direct market sounding may help to validate the IA's bankability assessment.
- Financiers will evaluate the bankability of a proposed financial structure based on the financial terms, the quality of the project's cash flows as security for the financing obligations, the track record of the proposed Private Partner and the creditworthiness of all counterparties. Attention is paid particularly to downside risks.
- Financiers will also assess macroeconomic and institutional drivers of bankability. These factors may include socioeconomic conditions, political conditions, exchange rates, interest rates and inflation trends, all of which will influence both the pricing of finance and their assessment of GSM.
- The legal, regulatory and institutional environment for the Project is also relevant. The analysis will consider whether government institutions and arrangements are broadly stable. Further factors for consideration include the enforceability of property and contractual rights, the legislative environment (e.g., tax policy) and the ability of private investors to obtain redress from the judicial system.
- At a project level, financiers will want to understand technical elements of the project in detail, including pricing and demand assumptions, construction, operations and maintenance strategy, site acquisition and access. This assessment is often informed by the prior assessment of legal, regulatory and institutional arrangements, as these will govern the availability of licences, approvals and permits. This will flow into the requirements for plans covering matters such as safety, environmental protection, heritage and inclusion, all of which will influence time and cost.

- As noted, financiers are typically highly incentivised to focus upon the management of downside risk, and will therefore review the PPP contract and other contracts in detail, particularly their rights and obligations in the event of default and termination.
- Increasingly, private financiers are bound by environmental, social and corporate governance requirements to consider and incentivise positive environmental and GEDSI outcomes. For example, some projects may be able to obtain concessional financing if they meet certain climate-related Key Performance Indicators (KPIs), reduce greenhouse emissions or use climate-friendly construction techniques and materials. A project's bankability may therefore be impacted by the demand for projects meeting such criteria relative to the supply of them by the public sector.

III. REVENUES STRUCTURES

1. Overview

1.1. In a PPP Contract, the revenue structure refers to how the Private Partner derives revenue from the Project. Revenues can be generated by the Private Partner charging users of the project's assets, and/or the IA may make payments to the Private Partner in return for the assets being made available. The PPP Contract should set out the details of all the processes relating to revenues received by the Private Partner.

1.2. The SOP for PPP Projects Volume I: Policies and Procedures provides three main forms of revenue structures, namely:

- Availability-based payment involving periodic service payments by the IA to the Private Partner.
- User pays or revenue-based payment involving the collection of user fees from public users by the Private Partner.
- Hybrid payment involving a combination of these approaches.

1.3. If the IA will make payments to the Private Partner, the calculation of those payments is typically set out in a 'payment mechanism'. The payment mechanism defines what payments are due to the Private Partner based on the performance of the project facilities or services against defined requirements.

1.4. A well-designed revenue structure protects and aligns the interests of both parties and establishes appropriate incentives for the Private Partner to deliver Value for Money (VfM) outcomes for the Government. It should provide sufficient revenue for the Private Partner to recover its capital and operating costs and earn an appropriate return, assuming it performs according to the standards specified in the PPP Contract and manages its costs consistently with its plans.

2. Types of Revenue Structures

2.1. Availability-based Revenue Structure

2.1.1. In an availability-based revenue structure, service payments from the IA are the sole source of revenue for the Private Partner.

2.1.2. Under a typical availability-based revenue structure, the IA makes fixed periodic payments over the life of the PPP Contract to the Private Partner (the payments may be indexed to inflation). These payments are determined via the payment mechanism set out in the PPP Contract. The payment is conditional upon the availability of the public asset or service at contractually defined quality or performance standards.

2.1.3. Availability-based revenue structures are typically adopted when the Private Partner is unwilling to bear revenue or demand risk, either in part or in full, and/or revenues will not be sufficient to cover service delivery costs. Payments to the Private Partner generally only commence once the asset is available for use by customers.

2.1.4. A variant structure involves a volume or usage-based payment, in which the IA pays the Private Partner a fixed amount per unit of volume used. For example, the IA may pay the Private Partner a 'shadow toll' for every vehicle that drives on a highway, or for every cubic meter of water produced from a water treatment facility.

2.1.5. A variant structure may be relevant where the Government wishes to incentivise the use of the project. It is mentioned only for interest and to explain practices in other countries, as it is not currently contemplated as an option under the PPP Law and SOPs.

2.1.6. Examples of different availability-based payment projects are set out in Table 1.

Table 1: Examples of availability-based payment revenue structures

Country	Availability-based	Volume or usage-based payment
Australia	• Sydney Metro Northwest • Sydney Light Rail • Ravenhall Prison • Royal Children's Hospital • Western Roads Upgrade	• Peninsula Link (Victoria) • Victorian Desalination Project
United Kingdom (UK)	• Silvertown Tunnel • Aberdeen Western Peripheral Route • Centre Manor Park Health Centre • Bootle Government Offices	• A13 dual carriageway
Philippines	• Philippines PPP for School Infrastructure Project Batch I	• N/A
Indonesia	• Dharmais Cancer Hospital PPP • Java Island Bridge Project PPP • Badung Underground Cable Network PPP	• N/A

2.2. User Pays Revenue Structure

2.2.1. When implementing a user pays revenue structure, the Private Partner generates revenues by charging tolls, fares or user fees from public users. The Private Partner bears the revenue or demand risk.

2.2.2. For the project to be exclusively user pays, there must be sufficient revenues to meet the capital and operating requirements of the project and to pay the Private Partner an appropriate return (assuming successful operations and the control of its costs). Otherwise, the project may require some form of government support to be made financially viable.

2.2.3. Examples of different user pays projects are set out in Table 2.

Table 2: Project examples of use-pays revenue structures

Country	User pays revenue structure
Australia	• Lane Cove Tunnel • Westlink M7 • CityLink

Country	User pays revenue structure
United Kingdom (UK)	• M6 Toll Road • M40 Motorway PPP
Philippines	• South Luzon Tollway • Cavite-Laguna Expressway • Southern Tagalog Arterial Road PPP • Mactan-Cebu International Airport PPP • Bulacan Bulk Water Supply PPP
Indonesia	• Kediri-Tulung Agung Road PPP • Cibitung-Cilincing Toll Road • Nusa Dua - Ngurah Rai - Benoa Toll Road

2.3. **Hybrid Payment Revenue Structure**

2.3.1. The IA may opt for a hybrid payment revenue structure involving a mix of availability payments and user fees. This model may be more relevant where:

– User fees are not sufficient to cover the project's capital and operating costs and provide a return to the Private Partner.

– The Government's fiscal capacity to fully support the project with availability-based payments is constrained.

– The Private Partner does not have the appetite to absorb the entire demand risk.

2.3.2. Hybrid revenue structures are particularly complex, and care should be taken to calibrate payments made by the IA so that windfall gains are avoided. This is particularly the case where revenues from customers exceed forecasts.

2.3.3. Case Study 1 and Case Study 2 showcase the use of the hybrid payment revenue structure to support the implementation of priority projects.

Case study 1: Manila Metro Rail Transit System Line 7 (Philippines)[3]

In June 2008, the Philippines Government awarded a 25-year concession (Build-Gradual Transfer-Operate and Maintain (BGTOM)) for Manila Metro Rail Transit System Line 7 (MRT-7) to Universal LRT Corporation BVI (ULC), a subsidiary of San Miguel Corporation (SMC).

The project involves design, construction, operation, maintenance and financing of the 23-kilometre elevated railway line from San Jose Del Monte, Bulacan, to MRT 3 North Avenue in Quezon City and the 22-kilometre asphalt road from Bocaue Interchange of the North Luzon Expressway to the intermodal terminal in Tala.

The total project cost is estimated at PHP 77bn. The construction has been repeatedly delayed due to right-of-way issues. The project was re-approved in 2013, and is expected to be fully operational in early 2025.

The PPP Contract adopts a hybrid revenue structure (i.e., a mix of availability payments, transit-oriented development (TOD) rights and net revenue shared with the Private Partner).

Availability payments were contracted to commence six months after the issuance of the

[3] Department of Transportation, 2008, MRT Line 7 Concession Agreement

certificate of substantial completion. They were structured as fixed semi-annual payments, subject to stated escalation, for 20 years, after which payments would step down for the last five years.

The PPP Contract provided for revenue to be shared in three tiers:

- Revenues above the amount necessary to produce an IRR of 14% for the Private Partner: 100% to the Government
- Revenues above the amount necessary to produce an IRR of 11.9% for the Private Partner: 50% to the Private Partner, 50% to the Government
- All revenues producing an IRR below 11.9%: 70% to the Private Partner, 30% to the Government.

Case study 2: Ground Lease Model, Public Housing Renewal Program - Package 1, Australia[4]

In May 2021, Homes Victoria entered into a contract with Building Communities (Vic) Limited to deliver new housing in several Melbourne suburbs. The PPP was procured under the Partnerships Victoria framework.

Homes Victoria is to lease public land to the project company, which will design, construct, finance and manage the sites for 40 years before handing all assets back to Homes Victoria at the end of the lease. The management services include tenancy, community building, asset management services, and collecting rents (social and private) from tenants.

- The contract provides for a hybrid revenue structure during the operational phase: Quarterly service payments (QSPs) from the IA funding fixed capital costs and the cost of asset refurbishment and replacement during the life of the project. QSPs are to commence from commercial acceptance and are subject to deductions or abatement where services do not meet the specified standards.
- Tenants pay rental revenue to the Private Partner, which is a major source of funding and aids in reducing the amount of capital contribution and QSPs required for further development.

3. Revenue Structure Design Requirements

3.1. The Law on PPPs and SOPs provides the following requirements for PPP revenue structures:

- Availability payments may be considered in cases where the Government has agreed that the service fees to be collected by the Private Partner from public users are insufficient or cannot or should not be collected from public users (Law on PPPs, Article 13).
- Availability payments shall be made only after the construction is completed and the operation has commenced (Law on PPPs, Article 13).
- Availability-based payments are conditional on the availability of the service or asset at a contractually specified quality (SOP for PPP Projects Volume II: Guidelines, Guidelines on GSM, 4.4.4i).

[4] Partnerships Victoria, Homes Victoria Ground Lease Model Project, Project Summary

- In very exceptional circumstances, the Government may provide a payment guarantee to backstop the IA's commitment to pay availability-based payments. The payment guarantee is subject to the endorsement of the Minister of the Ministry of Economy and Finance (MEF), and the approval of the Head of the Government (SOP for PPP Projects Volume II: Guidelines, Guidelines on GSM, 4.5.1). The Guidelines on Fiscal Management require the Head of the Government to request approval from the National Assembly.
- Unsolicited PPP Projects can only be structured under a user pays PPP model (SOP for PPP Projects Volume II: Guidelines, Guidelines on GSM, 4.7.2).

3.2. The terms governing the disbursement and collection of project revenue should be stipulated in the PPP Contract. In the case of an availability-based payment, this should involve the development of a formula-driven payment mechanism that provides a clear basis for calculating monthly payments to the Private Partner.

3.3. In the case of other revenue structures, there may be constraints applied to the collection of revenue, for instance, fixed indexation of tolls applied to road users. Regardless of the revenue structure, they should primarily be based on the principle of permitting a reasonable rate of return to the Private Partner while ensuring affordability to end-users and the Government.

3.4. Some of the key terms and conditions that should be stipulated in the PPP Contract include:

- The type of revenue structure (i.e., availability-based, user pays or hybrid).
- Right of the Private Partner to receive service payments from the IA or charge user fees.
- Conditions for commencement of the payment.
- Principles related to the calculation of the service payments or user fees and provision for abatements (deductions) and incentives (if any).
- Provision for the revision of service payments and user fees, including periodic adjustments for inflation and extraordinary adjustments for compensation change events.
- Processes related to invoicing, legal and compliance.

3.5. The type of revenue structure applied to a specific project is typically determined during Phase II: Project Preparation and Appraisal stage as per SOP for PPP Projects Volume I: Policies and Procedures.[5]

4. Risk and Cost of Capital

4.1. In many countries, user pays PPPs generally attract a higher cost of capital than availability-based PPPs, as the Private Partner must assume the demand risk. This should always be factored into any decision where there appear to be options as to which revenue structure may be best for a particular project, as the impact of the difference in cost of capital can be material, particularly if the demand risk is higher than normal due to, e.g., a new type of asset, a new charging model, unproven demand, a very high expectation of revenues, etc.

[5] Government of the Kingdom of Cambodia, 2022, SOP for PPP Projects, Volume 1: Policies and Procedures.

5. Key Considerations During Contract Preparation for Availability-based PPPs

5.1. Key Performance Indicators (KPIs) and Adjustments to Payments

5.1.1. One of the consequences of the availability-based revenue structure is that the Private Partner does not receive direct feedback on its service from the level of demand flowing through into user revenue, as revenue is received from the Government. To address this, the KPIs for availability-based PPPs are generally more prescriptive and detailed than for user pays PPPs.

5.1.2. KPIs are metrics, usually customised for each project, that set out how the performance of the Private Partner will be assessed. Availability payments for a period can be 'abated' (i.e., reduced) if the KPIs for that period are not achieved (noting that this may not be the only remedy under the PPP Contract).

5.1.3. KPIs can be very complex to define, and it is easy to make errors in terms of being too prescriptive or detailed, or so loose that they do not provide an effective discipline on performance. A good KPI is:[6]

- Reasonably specific, without being overly-detailed and avoiding any unnecessary complexity.
- Easy and inexpensive to measure if it has been achieved, with little personal judgement involved.
- Material (i.e., directed at issues that are sufficiently significant to justify defining, monitoring and enforcing a KPI).
- Focused on the service outcomes (i.e., the results of the project, rather than the inputs used).
- Consistent with the standard of performance that the IA assesses will best achieve VfM.
- Defined in a way that corresponds to each payment period.

5.1.4. Every sector will have different intended outcomes, and, therefore, different KPIs. Illustrative examples of the kinds of topics that may be considered relevant for KPIs include:[7]

- Operations and maintenance: the concessionaire fails to meet requirements on work zone safety, management, maintenance of traffic, and diversion routes for regular maintenance during operations.
- Levels of service: the concessionaire fails to appropriately manage the dynamic tolling mechanism to ensure the level of service of the lanes does not become degraded. In addition, and to be measured separately, upon receiving notice of a problem with the dynamic tolling mechanism, the concessionaire fails to submit a rectification plan to the department for approval.
- Project management and communications: the concessionaire fails to produce, review, and, if necessary, update plans during the operating period in accordance

[6] These characteristics share some similarities with the 'SMART' goals approach first defined by US academics in the early 1980s, and which are now popular in a wide range of professional and personal development settings. S.M.A.R.T. is an acronym for specific, measurable, achievable, realistic and time-based. SMART goals do not, however, address the issues of prioritising output measures over input measures, simplicity and materiality.

[7] The World Bank, 2011, Key Performance Indicators in Public-Private Partnerships

with the agreement including, but not limited, to (1) the concessionaire management plan; (2) the hazardous substances management plan; (3) the communication, public outreach, and community education plan; (4) the life-cycle maintenance plan; and (5) the operations and maintenance plan.

5.1.5. Note that these are examples of the topics of KPIs and not the KPIs themselves. The actual KPIs are often defined using mathematical formulas to avoid any ambiguity, and could specify, for example, that payments will be reduced by a fixed amount for every failure to provide a required train service, after a tolerance level of, say, 2%.

5.1.6. The development of the KPIs for a project can be a highly technical area and is usually undertaken with the assistance of a TA.

5.2. Other Consideration

5.2.1. In addition to KPI and adjustment mechanisms, preparations for an availability-based PPP should consider:

- Commencement of payment: Payments to the Private Partner should commence after construction is completed and operations have commenced. The IA may seek additional time before commencing payments following the construction completion and operational commencement if it needs to undertake performance testing, fix asset defects, or implement a user approval process.
- Permitted exemptions: The IA may allow certain exemptions and continue to pay periodic payments during planned maintenance periods or certain events out of the control of the Private Partner. The IA should set out such events in the PPP Contract.
- Tiered payments for de-risking: some countries opt to improve the bankability of the PPP Contract by structuring availability payments into different components, covering.
- Repayment of principal and interest of debt which may be exempted from any deduction once the asset is built and commissioned (which can significantly reduce the cost of debt finance).
- Operations and maintenance costs with limited potential adjustments or deductions.
- Equity repayment and reward subject to penalties or deductions in case of low performance.
- Permitted adjustments: PPP Contracts often provide for adjustments to availability payments during the project, including.
- Periodic adjustments for inflation and foreign exchange rates.
- Permanent adjustments due to compensation events (e.g., changes in law and modification or adjustment to scope or services).
- The possibility of a payment guarantee, as previously noted.

6. Key Considerations During Contract Preparation for User-pay Based PPPs

6.1. Pricing of User Fee

6.1.1. The PPP Contract may include a mechanism for determining the prices to be paid by users to reduce the risk of unrestricted pricing by the Private Partner (noting that many infrastructure projects can have monopolistic characteristics).

6.1.2. Different approaches adopted for the calculation of user fees include:

- A fixed base user fee and a formula for periodic and extraordinary fare adjustments for such matters as inflation.
- Application of prevailing market rates or by expert determination.
- Determination of the appropriate prices by regulatory authorities.

6.1.3. Generally, Private Partners prefer a fixed mechanism based on formulas to the risk of the price being set outside experts or regulatory authorities.

6.2. **Differentiated Pricing**

6.2.1. The IA may allow the Private Partner to charge a differentiated price based on time of usage (e.g., during peak vs non-peak hours) or frequency of usage by the users (e.g., daily, weekly, monthly).

6.3. **Risk and Revenue Sharing**

6.3.1. Depending on the nature of the project, the IA may wish to participate in any potential outperformance of the project forecasts. Typical provisions include a sharing mechanism in which revenues that exceed a defined threshold are subject to a percentage sharing with the IA.

6.3.2. Key considerations for designing risk and revenue sharing mechanisms include:

- The level of earnings to be shared. Typically, the sharing is based on revenues rather than net earnings—revenue is generally easier for the IA to validate as it is less subject to detailed analysis of the Private Partner’s accounts, and using earnings as the basis for sharing would mean that the IA is also taking risk on the Private Partner’s performance on costs, which is usually not desired.
- Balancing the desirability of avoiding windfall profits while maintaining incentives to maximise the use of the asset. This is essentially a trade-off with no single best approach—any reduction in the Private Partner’s access to higher revenues necessarily reduces their incentives to continue maximising revenues. Preserving at least a substantial proportion of the revenues for the Private Partner may result in them making unintended profits, but this would be in the context of a highly successful operation of the asset with utilisation above the original target for the project.
- Considering the potential for sharing in downside scenarios, in which the IA partially compensates the Private Partner for performance that is worse than expected, so that the incentives are symmetrical. The rationale for doing so is that bidders are generally averse to asymmetric risks in which they are responsible for all downside but are limited on the upside. Making some provision for the sharing of downside risks has the potential to therefore reduce the project’s cost of capital, improving overall VfM.

6.4. **Permitted Adjustments**

6.4.1. As in the case of availability-based revenue structures, the IA should consider how the Private Partner’s revenues from users may need to change to adjust for compensation events (e.g., change of law, modifications or adjustment to scope or services, etc).

6.5. **KPIs**

6.5.1. Although usually much less significant in user pays revenue structures, consideration should be given to the possibility of using KPIs and abatement to address matters under the PPP Contract that are not fully reflected in the incentives provided by user-generated revenues.

6.6. **Provision for Subsidy**

6.6.1. The IA may supplement user fees with operating subsidies based on availability or performance to improve the project's financial feasibility. This may create a rationale for greater control over the quality and performance of the asset than would be typical in a pure user-pays PPP.

6.7. **Provision for Supplementary Sources of Funding**

6.7.1. The IA may grant the Private Partner rights to additional revenue streams to improve the financial viability of the project (e.g., transit-oriented development rights (rights to develop property assets in and around rail and bus stations) and advertising rights).

7. International Best Practice

7.1. Some comparable practices for revenue structure in benchmark countries are set out in Table 3.

Table 3: Revenue Structures - comparable practices in benchmark countries

Country	Key characteristics
Australia	• Under the National PPP Guidelines Volume 2 Practitioner's Guide, user-pay models are more suitable for economic infrastructure, and availability-based models are more suitable for social infrastructure.[8] • For availability-based models, key terms in the PPP Contract and associated revenue structures shall include: – Payments are to be made when the contracted service is available. – Availability payments should be paid only to the extent the service is available. – Abatements should be imposed for sub-standard performance. – Performance should be linked to an agreed set of standards or KPIs which is related to quality, timelines or other service delivery requirements. – Abatements should be reflective of the severity of the failure. • In user-pay models, the Private Partner's ability to charge users is prescribed and constrained by the PPP Contract. For example, a toll road contract may set out:[9]

[8] Department of Infrastructure and Regional Development, 2008, National PPP Guidelines: Overview, Infrastructure Australia

[9] Department of Infrastructure and Regional Development, 2011, National PPP Guidelines, Volume 7: Commercial Principles for Economic Infrastructure

Country	Key characteristics
	– Commencement of tolls only when the facility is fully operational. – Base tolls for different vehicle categories, toll-able sections, and time of usage. – The method for escalation of tolls (e.g., quarterly or annual increases in CPI). • Separate guidance provided by Partnerships Victoria is provided below: **Partnerships Victoria PPP Projects, Department of Treasury and Finance:** • As per the Availability Payment PPP Standard Project Deed, key terms for the periodic service payments are as follows:[10] – Payment is fixed at the time of financial close and may be adjusted only for change compensation events. – Payment shall commence from the date of commercial acceptance (i.e., when the project is available for use and services can be performed). – The Government's preferred position is that payments are made monthly and in arrears during the operational phase; however, quarterly or other periodic payments may be appropriate for certain projects. – Payment shall be subject to abatement where the assets are not available for use, or services are not performed per specified standards. – Other provisions, such as indexation, incentive payments, etc., may be included. • Service payments may comprise the following components: – Availability fee: remunerates the Private Partner for whole-of-life costs as per specified service specifications and related performance measures. Availability fees may include sub-components (e.g., base fee, maintenance payment, etc., allowing differential treatment for commencement, indexation, abatement, etc.) – Operating fee (if any): relevant for projects where the IA intends to pay the Private Partner separately for volume or output (e.g., in a water desalination plant. The availability of project assets (availability component) may be separated from the production of treated water (operating fee component)). – Pass-through costs (if any): covers expenses incurred by the Private Partner where the parties agree that the IA should bear the risk of the actual realised value of them. For example, insurance

[10] Partnerships Victoria, Policy, Guidelines and Templates

Country	Key characteristics
	premiums are usually considered a pass-through cost. An adjustment mechanism may be required where the IA bears the whole, or a portion of price or volume risk. For example, heightened volumes may change the premium applicable to a given insurance policy. Fluctuations in price and/or volume are likely to increase or decrease the pass-through costs. Price risks may arise where prices are determined by third-party suppliers and are highly volatile. Volume risks may arise where the Private Partner has negligible or limited control over the quantum or type of usage.
UK	• HM Treasury provides a detailed approach to availability payment mechanisms for PF2 projects.[11] • Key determinants of availability payments include service availability and the performance of the facility. • For availability of the service: – Criteria should be objective, measurable, reasonable, achievable and material. – Complex definitions requiring high monitoring costs should be avoided. – Higher weightings should be allocated to areas that are more critical to the service. • For the performance requirements component of an availability-based payment mechanism, performance should be defined in terms of output requirements (i.e., service standard required, rather than prescriptive inputs (how the service will be delivered)). • Performance requirements should set out: – The level of performance required. – The means by which the IA can monitor the Private Partner's performance against the required level. – The consequences in case of poor or sub-standard performance. – The provision for a ratchet mechanism (if any) (i.e., increases in payment deductions to incentivise Private Partner to rectify repeated or consistent failures).
India	• Key terms of user-pays PPP Contracts are:[12]

[11] HM Treasury, 2012, Standardisation of PF2 Contracts Draft (Note that the UK Government has discontinued the use of PF2 for new government projects, and has not indicated an intention to reintroduce this contract or develop an updated version. However, new projects in Scotland and in Wales may still apply analogues of the PF2 contract structure, and the PF2 still applies to approximately 600 operating project financed contracts across the UK).

[12] NITI Aayog, 2020, Public Private Partnership in Operation and Maintenance of Passenger Ropeways MODEL CONCESSION AGREEMENT (DRAFT)

Country	Key characteristics
	– The Private Partner is allowed to collect the fee from users from the commencement date up to the transfer date. – User fees shall be revised annually on 1 April each year. – The Private Partner, after obtaining IA approval, may collect differential fees during peak and non-peak hours or for frequent users (in the case of transport, for example, return passes, daily passes, weekly passes or monthly passes) • Under the availability-based payment model concession agreement the PPP Contract shall set out:[13] – A fixed or annuity payment schedule. – Specific dates or time intervals for the payment. – A mechanism for deductions and bonus payments. • The hybrid annuity model concession agreement by the Ministry of Road Transport and Highways (MoRTH) in India provides that:[14] – The Government shall provide 40% of the total project cost during the construction period. – The balance of the total project cost shall be provided as annuity payments during the concession period, along with interest on the outstanding debt amount. – Fixed payments will be made towards operations and maintenance costs. – All payments shall be adjusted for inflation using a weighted average of indices for wage price inflation and consumer price inflation.
New Zealand	• The Infrastructure Commission's Contractual Framework for the Standard Form PPP Project Agreement provides for:[15] – The calculation of periodic unitary payment (generally quarterly). – A performance regime that provides the standards expected of the Private Partner, including KPIs, abatements to the unitary charge for the sub-standard performance, etc.

[13] Indian Railways Institute of Transport Management, 2001, Model Concession Agreement For Annuity Based Project

[14] Ministry of Road Transport and Highways, 2016, Hybrid Annuity Model for implementation of Highway Projects

[15] New Zealand Infrastructure Commission Te Waihanga, 2020, Contractual Framework for the Standard Form Public Private Partnership (PPP) Project Agreement

Country	Key characteristics
South Korea	• The Standard Concession Agreement for road build-transfer-operate (BTO) projects provides that the initial user fee should be determined based on the following data provided by the Private Partner:[16] – The method of using facilities under the project. – The calculation of the initial user fee applicable from the commencement date. – The method of collecting user fees. – A full or partial exemption from user fees and eligibility for such exemptions. – The level of user fees for similar facilities. • User fees are to be adjusted yearly based on CPI fluctuations at a set date. It may also be adjusted if additional costs or losses are incurred due to a force majeure event, the IA's fault or any other cause specified in the PPP Contract. • The IA may also provide for minimum revenue guarantee to the Private Partner.

8. Guiding Principles

8.1. Availability-based Revenue Structure

8.1.1. Availability-based payment involves periodic service payments by the IA to the Private Partner. This revenue structure is most suitable for projects that do not generate an economic return.

8.1.2. A payment mechanism is used in an availability-based structure and defines what payments are due to the Private Partner based on the performance of the project facilities or services against defined requirements.

8.1.3. The payment mechanism should be formula-driven and provide a clear basis for calculating monthly repayments from the IA to the Private Partner.

8.1.4. The PPP Contract should consider the following issues for availability-based revenue structures:

- Conditions for commencing payments.
- Performance criteria and reporting.
- Permitted exemptions – (e.g., maintenance periods or specific events out of the control of the Private Partner).
- Computation of abatements (i.e., deductions).
- Tiered payments for de-risking.
- Periodic and permanent adjustments – (e.g., for inflation, foreign exchange rates, changes in law, modification or adjustment to scope or services), and

[16] Public and Private Infrastructure Investment Management Center, 2010, Draft Standard Concession Agreement for Build-Transfer-Operate Projects

- Whether to offer a payment guarantee.

8.2. User-Pays Revenue Structure

8.2.1. User-pay involves the collection of user fees from public users by the Private Partner. This revenue structure is most suitable for projects that generate an economic return.

8.2.2. Unsolicited PPP Projects can only be structured under a user-pays revenue structure.

8.2.3. In many countries, user-pays PPPs generally attract a higher cost of capital than availability-based PPPs, as the Private Partner must assume the demand risk, which financiers will consider when negotiating finance terms. This should always be factored into any decision where there appear to be options as to which revenue structure may be best for a particular project, as the impact of the difference in cost of capital between the two options can be material, particularly if the demand risk is higher than normal.

8.2.4. The PPP Contract should consider the following issues for user pays revenue structures:

- Pricing of user fees, either by setting tariffs or rules on how tariffs may be set.
- Differentiated price – (e.g., different price for time of day or frequency of use).
- Risk and revenue sharing arrangements.
- Periodic and permanent adjustments – (e.g., for inflation, foreign exchange rates, changes in law, modification or adjustment to scope or services).
- Whether a subsidy will also be required, and how it should be structured.
- Whether to make provision for supplementary sources of funding.

8.3. Hybrid Revenue Structure

8.3.1. Hybrid payment involves a combination of both the availability-based and user-pays revenue structures. This revenue structure is most suitable where user fees are not sufficient to produce a profit for the Private Partner, the Government is not able to fully support the project through availability-based payments, and/or the Private Partner does not have the appetite to absorb all demand risk.

8.3.2. Hybrid revenue structures will be required to combine elements of both the availability-based revenue structure and user-pay revenue structures.

8.3.3. Care should be taken to calibrate availability payments under a hybrid structure to avoid awarding windfall gains to the Private Partner where user pays revenue receipts exceed forecasts.

IV. GOVERNMENT GUARANTEES AND VIABILITY GAP FINANCING

1. Overview

1.1. GSMs comprise financial and non-financial support that the Government may offer to support the implementation of PPPs. GSMs may be offered to the Private Partner or other entities relevant to the PPP, including lenders, to ensure the project is financially viable, bankable, and capable of undergoing construction and operations in a timely manner. [17]

1.2. The two principal forms of GSMs discussed in this section are:

- Government guarantees, and
- Viability Gap Financing (VGF).

1.3. Other forms of GSM include availability payments, asset contributions and investment incentives. Considerations related to availability payments are described in Section III (Revenue Structures).

1.4. Assets may be contributed to a project where this is considered preferable to other forms of GSM. For example, it may be preferable for the Government to grant a low-cost lease over some land that is needed for a project than charging a full market rent and then making availability payments reflective of the full market cost. To properly do so, the value of the contribution should be assessed both from the Government's perspective (i.e., what it costs to provide) and from the perspective of the Private Partner in terms of what other forms of GSM are avoided. Further details on issues relating to asset handover are set out in Section V (Site).

1.5. Other investment incentives, such as tax exemptions or certain securities are regulated under Chapter VIII of the Law on PPPs and should be considered on a case-by-case basis. As with asset contributions, the value of the incentive should be accurately valued and reflected in the overall assessment of value for money.

1.6. As a starting position, the PPP should start on the assumption that no GSMs are required. This approach ensures that any GSM is identified and implemented on a need basis.[18] The provision of government support is to be regarded as exceptional and is subject to the approval of MEF.

2. Reasons to Consider GSMs

2.1. Reasons to consider GSMs in a PPP are:

- To achieve a viable business case where subsidisation of the PPP is required (particularly the case for social infrastructure projects).
- To support bankability and enhance value for money.
- To support bankability and enhance value for money; To help attract private investment and enhance investors' confidence in the project concerned, along with confidence in the Government's long-term commitment to the PPP model.

[17] Government of the Kingdom of Cambodia, 2021, Article 34 of Law on PPPs
[18] Government of the Kingdom of Cambodia, 2021, Standard Operating Procedures for PPP Projects Volume II: Guidelines on Government Support Measures

- To optimise the risk allocation, GSMs can be used by the Government to retain some risks that it may be able to manage and/or mitigate at a lower cost than the private sector.

3. Process to Approve GSMs

3.1. The SOPs provide the process for IAs to identify the need and approve GSMs in the following steps:

- The preliminary financial viability analysis should first investigate alternatives to GSMs to achieve viability (e.g., increasing the length or scope of the PPP Contract, utilising opportunities for indirect revenue or an increase in the user charge).
- The Feasibility Study should identify the need to apply GSMs for a PPP based on a risk assessment and assumed risk allocation between Government and the private sector, as informed by market engagement. It should analyse options for GSMs to optimise for the minimum level of support necessary to ensure project viability.
- The IA prepares and delivers a project proposal (including the proposed GSM package) to MEF and the Head of Government for approval. The proposed GSM package is then reviewed and validated based on a value for money proposal, PPP fiscal risk assessment, budget and affordability.
- The financial structure of the PPP Contract, including any approved options for GSMs, is communicated to bidders as part of the bid documents.
- GSMs will be issued in accordance with the applicable laws and regulations when a PPP Contract is signed between the Private Partner, the IA and MEF (on behalf of the Government).
- During the implementation and management of the PPP Contract, the IA continuously monitors and manages any government support commitments. The IA is responsible for securing any necessary budget from MEF, depending on the nature of the support.

4. Government Guarantees

4.1. Government guarantees are sovereign obligations to protect the beneficiary from defined losses if specified conditions occur or to satisfy certain obligations under the PPP Contract.[19]

4.2. The parties in a government guarantee are:

- The guaranteed entity – the IA.
- The guarantor – the provider of the guarantee, MEF.
- The beneficiaries – typically the Private Partner and/or private sector investors or lenders.

4.3. The two broad categories of government guarantees are

- Financial or credit (debt) guarantees, and
- Performance guarantees covering targeted risks.

4.3.1. **Financial or Credit (Debt) Guarantees**

[19] The World Bank, 2020, Government Guarantees for Mobilizing Private Investment in Infrastructure

4.3.1.1. Financial guarantees involve the Government taking on the debt service obligations of the borrower in the event of the borrower's default.

4.3.1.2. They are rarely used in PPPs because they undermine the risk allocation that is the purpose of the PPP model. Financial guarantees should be avoided unless there is a compelling reason. There is no guidance available on these guarantees and any proposal to provide a financial guarantee should be discussed at an early stage with MEF.

4.3.2. **Performance Guarantees**

4.3.2.1. Performance guarantees involve the Government covering the risk of the Government failing to perform its obligations or cover specific risks linked to the PPP Contract.

4.3.2.2. They are examples of such guarantees in a number of developing markets. The IA or Government may discharge its obligations under a performance guarantee if it is able to cure the default.

4.3.2.3. Performance guarantees may seek to address:

- Payment or performance risk: the risk that a party defaults on its payment or performance obligations (e.g., the Government misses availability payments to the Private Partner).
- Sovereign or political risk: the risk that government may default on its 'sovereign' debt, or that political instability affects project delivery and/or operations (e.g., unexpected nationalisation of private assets).
- Foreign exchange risk: the risk that movements in foreign exchange rates adversely impact on the Private Partner's revenues or expenses, or the risk that local currencies cannot be converted to foreign currencies or remitted abroad.
- Revenue and demand risk: the risk that forecast project revenue/demand is not realised.
- Other risks (e.g., failure of the Government to perform certain obligations, such as obtaining approvals, acquiring land or securing access to the project site).

4.3.2.4. Infrastructure may be financed by debt denominated in a foreign currency. In the event of a weakening in the local currency, the interest and principal repayments on that debt will become more expensive and could become difficult to service out of revenues generated in the local currency. In order to make it feasible for a project to attract this kind of debt, a government may decide to guarantee the cost of the debt service in the local currency. This protects the Private Partner, but then exposes the Government to these risks.

4.4. The Law on PPPs sets out reasonably broad authority for the Government to grant guarantees, including:

4.4.1. **Payment or Performance Guarantees**

4.4.1.1. Payment or performance guarantee is a type of guarantee that grants compensation if the IA or any other public entities do not fulfill their obligations as stipulated in the PPP Contract or relevant agreements. These may include off-take purchase agreements (e.g., power purchase agreements or bulk water off-take agreements) or availability payments. Payment guarantees may cover periodic payment commitments and/or compensation related to termination, as specified in the PPP Contract.

4.4.1.2. The SOPs provide that the granting of a payment and performance guarantee is subject to

- The necessity of the guarantee to ensure or optimise the project's bankability (e.g., by securing more favourable loan terms).
- The IA ensuring that the guarantee is only used to manage cash availability or liquidity in respect of its payment obligations for the relevant project. The IA may not use the guarantee with the effect of subsidising its yearly organisational operating budget.
- The annual guaranteed amount not exceeding the aggregate payments to be made by the IA in the corresponding year.
- The established legal and administrative procedures for the approval of the guarantees being followed.[20]

4.4.1.3. The SOPs make it clear that payment and performance guarantees will only be provided in exceptional circumstances and following all necessary procedures.

4.4.1.4. An example of the provision of payment government guarantee or a PPP is set out in Case Study 3.

Case Study 3: Sydney Metro City & Southwest PPP[21]

- In November 2019, the State of New South Wales (NSW) entered into a PPP Contract with a Private Partner to deliver the core rail systems for Sydney Metro City & Southwest (SMCS), which integrates a new rail line with the existing Sydney Metro Northwest Line.
- The Private Partner is responsible for the design, operation, maintenance and financing of SMCS, with handback of the asset to the IA at the end of the contract term. The contract value is Australian Dollar (AUD) 3.7 billion, including AUD 1.7 billion for new metro trains and core rail systems and AUD 2 billion for operations and maintenance components.
- The financing structure comprises a mix of senior debt and equity, along with capital contributions from the NSW government.
- Under the PPP Contract, the IA has obligations to make:
  - Capital contributions (i.e., VGF).
  - Monthly service payments.
  - Licence payment.
  - Milestone payments.
  - Phase two construction payments.
  - Final completion payments.
- The NSW government guarantees the IA's performance of its payment obligations under the PPP Contract and associated agreements to the Private Partner.

[20] Government of the Kingdom of Cambodia, 2021, Standard Operating Procedures for PPP Projects Volume II: Guidelines on Government Support Measures
[21] New South Wales Treasury, 2020, project Summary City & Southwest OTS2 PPP

4.4.2. Sovereign or Political Risk Guarantees

4.4.2.1. Sovereign or political risk guarantees are types of guarantees that grants compensation if political actions or government policies result in an adverse impact on the Private Partner. This is mainly used to address the risks of expropriation, nationalisation and violence driven by political activities.

4.4.2.2. Guarantees for sovereign or political risk are currently unavailable for PPPs in Cambodia.[22]

4.4.3. Other Guarantees

4.4.3.1. Other guarantees are other types of guarantees approved by the GKC in accordance with applicable Cambodian laws and regulations.[23]

4.4.3.2. Other guarantees are not defined and are left open for future policy determination. They could potentially address, e.g., the foreign currency risks mentioned earlier in this section.

4.4.3.3. IAs should expect that novel guarantees that have not previously been granted in Cambodia will be subject to even more scrutiny than payment and performance guarantees.

4.5. The legal and administrative procedures to be followed currently comprise the Law and SOPs, primarily the guidelines on GSM. The procedures are further defined in the Guidelines on Fiscal Management of PPP.

4.6. Considerations in Issuing Government Guarantees

4.6.1. The rationale for deciding to provide a government guarantee on a particular project should be clearly articulated in terms of the costs and benefits involved. They will generally reflect circumstances where the risks are either within a government's control or are not acceptable to the market. Government guarantees should be carefully structured to provide only the minimum support required to ensure bankability.

4.6.2. Calling upon a Government Guarantee

4.6.2.1. The IA is usually granted a cure period under the PPP Contract to cure any default that may have given rise to the potential calling of a guarantee. For example, if an off-taker has failed to make a required payment, then the Government may be able to influence the payment to be made so that the guarantee is not required.

4.6.2.2. Once any such possible remedies are exhausted, the calling of the guarantee may either be agreed by the Government or the Private Partner may raise a dispute under the dispute resolution provisions of the PPP Contract.

4.6.2.3. Any payments will need to be validated by MEF before making them.

4.6.3. Contingent Liabilities and Financial Reporting

4.6.3.1. Contingent liabilities are possible future payment commitments whose occurrence, timing and quantum depend on some uncertain future event and, therefore, create a fiscal risk. The granting of performance guarantees creates a contingent liability for the Government.

[22] Government of the Kingdom of Cambodia, 2021, Standard Operating Procedures for PPP Projects Volume II: Guidelines on Government Support Measures

[23] Government of the Kingdom of Cambodia, 2021, Point 3 of Article 13 of Law on PPPs

4.6.3.2. It is more challenging to assess the cost of contingent liabilities than the cost of direct liabilities and upfront capital costs due to the uncertainty involved. Historically, the difficulty in predicting when guarantees are called, and the total realised cost has led many governments to give less scrutiny to the budget process than regular expenditure. This can be particularly unfortunate if a general crisis (e.g., in exchange rates) triggers similar guarantees on a large number of projects simultaneously. Again, for this reason, guarantees will only be considered by MEF in exceptional circumstances to ensure project bankability.

4.6.3.3. The current approach to reporting on contingent liabilities is set out in the SOPs.[24] It is aligned to the Government's current practice of cash-based accounting, with payments on guarantees to be recorded as incurred. Future risks are managed through forward budgeting and the establishment of a reserve fund.

4.6.3.4. MEF through the GDPPP is responsible for the managing, monitoring, and reporting on all matters related to fiscal commitments and risks that may give rise to contingent liabilities under the PPP Contract. All the contingent liabilities risks will be reported in the Disclosure of Major Contingency Liabilities under PPPs and Reporting Exceptions and High Severity Risks. GDPPP will be required to prepare these reports. The Project Management Unit (PMU) will be responsible for collecting and compiling all the information on the risks and providing them to the GDPPP. There is also currently a program of work being implemented to gather the data on the contingent liabilities relating to existing concession arrangements.

4.6.3.5. The Government is planning to move government financial reporting to an accrual accounting system in the coming years. MEF intends that the implications of this program for the reporting of guarantees and other contingent liabilities are addressed in the Fiscal Management Guidelines. This guidance will need to take account of the timing of the Government's program to transition to accrual accounting and the likely need for transitional arrangements over some years.

5. Viability Gap Financing

5.1. VGF is a subsidy provided by the Government to the Private Partner to reduce the cash required from the Private Partner and increase the project's financial viability. The subsidy payment (also referred to as a contribution) shall be based on specific performance milestones after the commencement of construction and can be renewed for up to two years after the completion of construction.[25] It is a form of direct fiscal payment.

5.2. Article 15 of the Law on PPPs provides for the establishment of the VGF Facility, which is a special source of capital to fulfil the financial needs of the PPPs. Once established, MEF is responsible for the budget, management and operation of the VGF Facility.[26] The procedures for managing the VGF Facility are under development and should include detailed principles on the applicability of VGF to specific projects.

5.3. The granting of VGF shall be endorsed by the Minister of MEF and approved by the Head of the Government.

[24] Government of the Kingdom of Cambodia, 2021, Standard Operating Procedures for PPP Projects Volume II: Guidelines on Government Support Measures
[25] Government of the Kingdom of Cambodia, 2021, Article 13 of Law on PPPs
[26] Government of the Kingdom of Cambodia, 2021, Point 12 of Article 14 of Law on PPPs

5.4. VGF is to be provided only on an exceptional basis. It may be considered in cases where:

- The high capital cost of a PPP results in an un-bankable or unaffordable business case.
- The IA can partially reduce the capital expenditure without diminishing private sector incentives.
- The IA can clearly define the milestones for VGF payments.

5.5. An example of VGF using capital contributions is set out in Case Study 4.

Case Study 4: Homes Victoria Ground Lease Model project (Australia)[27]

- In May 2021, the State of Victoria entered into a PPP Contract with the Private Partner to deliver 1,110 new homes in three sites across Melbourne, Victoria.
- The Private Partner is responsible for designing, constructing, financing, and managing dwellings at each site for 40 years. The Private Partner will build 619 brand new social housing dwellings, 126 affordable homes and 365 market rental homes, including 52 specialist disability accommodation dwellings.
- The financing structure comprises a mix of senior debt in the form a 15-year sustainability bond facility and mezzanine loan funding, along with capital contributions from the Victorian government.
- Under the PPP Contract, the IA has obligations to make quarterly service payments and capital contributions (i.e., VGF), subject to any abatement where services are not delivered to the required performance standard.
- The IA will make AUD 50 million capital contributions towards the project, set aside at Financial Close. This contribution will be drawn progressively during construction as works are completed and certified by an independent payment certifier. The Private Partner's investment is first applied in parallel with debt financing drawdowns.

5.6. **Considerations for VGF**

5.6.1. If VGF is contemplated by the IA and Private Partner, its structure should be documented in the PPP Contract. The VGF structure will set out:

- The total size of the VGF.
- The size and timing of each VGF payment.
- The conditions for each payment.

5.6.2. Principles for the sizing of VGF for each project will be set out in a sub-decree to the SOPs expected to be issued later in 2025.[28] The VGF for a project should be appropriate to the risk allocation, project features and market conditions and limited in size to what is necessary to produce the intended outcome.

5.6.3. The SOPs provide that VGF payments can be made during the construction and/or operations phase where:

[27] Partnerships Victoria, 2021, project Summary Homes Victoria Ground Lease Model project

[28] Government of the Kingdom of Cambodia, 2021, Standard Operating Procedures for PPP Projects Volume II: Guidelines on Government Support Measures

- The PPP Project will be transferred back to the Government or the IA at the end of the term, on terms and conditions specified in the PPP Contract.
- The Private Partners shall contribute at least 51% of equity capital of the Special Purpose Company (SPC).
- The VGF ceiling amount shall be specified in the PPP Contract as approved by the Head of the Government. Any proposed changes to the ceiling amount can only occur under exceptional circumstances such as reasons of public policy or national interest.
- The Private Partner has signed legally binding agreements with all the lenders and investors and applicable performance standards set out in the PPP Contract have been met.
- Construction has commenced.
- Any VGF payments shall only be disbursed after substantial equity has been invested into the SPC, which should at least be 50% of the total equity required for the PPP Project and the first instalment of debt by senior lenders has been contributed into the PPP Project.[29]

5.6.4. The PPP Contract should set out the milestones for VGF payments.

5.6.5. The IA will make VGF payments to the Private Partner in line with the conditions and timing set out in the PPP Contract. The IA is responsible for securing the necessary budget from MEF, depending on the nature of the VGF structure, (e.g., it may form part of the annual budget request). The IA may have to request for an additional budget allocation in case of a shortfall.

5.6.6. An example of a VGF structure (in this case, monthly contributions during the design and construction phase), is set out in Case Study 5.

Case Study 5: Victorian Comprehensive Cancer Centre (Australia) [30]

- In December 2011, the State of Victoria entered into a PPP Contract with a Private Partner to deliver the:
  - Design, construction and finance of the Victorian Comprehensive Cancer Centre (VCCC) facilities.
  - Construction management delivery of the VCCC facilities.
  - Provision of facilities management services over 25 years.
- The contract value is AUD $1.8 billion, which includes the design and construction costs, lifecycle asset replacement costs, maintenance and facilities management costs over 25 years
- The Government provided capital contributions (e.g., VGF) during the design and construction phase of the project, citing value-for-money reasons and made possible by Australian Government funding.
- Under the PPP Contract, the State was required to make:

[29] Government of the Kingdom of Cambodia, 2021, Standard Operating Procedures for PPP Projects Volume II: Guidelines on Government Support Measures

[30] Partnerships Victoria, 2012, project Summary Victorian Comprehensive Cancer Centre project

- Quarterly service payments during the operating term, subject to any abatement if services were not delivered to the required standard.
- Fee payments during the design, construction and commissioning phase of some facilities.
- Monthly contribution payments totalling AUD 300 million during the design and construction phase.

- The quantum of the contributions represented a relatively small portion of the total required capital funding.
- The Government will make the monthly contribution payments based on the actual design and construction of the works carried out as certified under the finance documents. These funds are proportionately injected along with senior debt and equity from Private Partner and must be used to pay the builder directly in that monthly period under the construction contract between the Private Partner and the builder.

6. International Best Practice

6.1. Some comparable practices for government guarantees in benchmark countries are set out in Table 4.

Table 4: Government guarantees – comparable practices in benchmark countries

Country	Key characteristics
Vietnam[31]	• The Law on Public-Private Partnership (Vietnamese PPP Law) took effect in January 2021 and replaced previously issued PPP regulations. • The new Vietnamese PPP Law removes a previous provision expressly providing that the Government will grant guarantees in respect of the contractual obligations of State-owned enterprises. • Article 81 of the Vietnamese PPP Law provides that a government guarantee may be granted to foreign investors in relation to the availability of foreign currency to support project capital transactions, loan repayments and transfer of profits. Such guarantees must be limited to 30% of project revenue after subtracting project expenses (compared to historical guarantees of up to 100% of the foreign exchange exposure).[32]
Philippines[33]	For solicited projects, government may provide: • Direct financial government guarantees – involving government assuming responsibility for the repayment of the Private Partner's debt in the event of a loan default. • Performance undertakings – involving government assuming responsibility for the performance of the IA's obligations under the contractual agreement, including the payment of monetary

[31] Socialist Republic of Vietnam, 2021, Law on Public Private Partnership Investment
[32] White & Case, 2020, Vietnam's new Law on Public Private Partnerships
[33] Republic of Philippines, 2022, Revised Implementing Rules and Regulations to Philippine BOT law

Country	Key characteristics
	obligations, if the IA defaults. The PPP may be charged a risk premium in return for the provision of the guarantee.
Australia	• Australian federal and state-level governments have typically maintained sufficient credit ratings to not require financial guarantees for PPPs.[34] • In New South Wales, government guarantees for PPPs are regulated under specific legislation. The Government may guarantee the due performance of any obligations incurred by an IA. The granting of guarantees is entirely at the discretion of the Government and provided on a case-by-case basis where a bidder demonstrates a clear cost-of-financing benefit to the Government.[35]
UK[36]	• In 2012, government introduced the 'UK Guarantee Scheme' to support major projects, which will run until 2026. It was established to encourage alternative debt funding, under which government guarantees debt raised to fund infrastructure projects of national significance that have been unable to raise finance in the financial markets. • The Government has wide discretion over how any guarantee is structured in terms of scale, timing, risk exposure and relationship, subject to the terms and dynamics of each project. Guarantees can cover key project risks such as construction, performance, or revenue risk.

6.2. Some comparable practices for VGF in benchmark countries are set out in Table 5.

Table 5: VGF - comparable practices in benchmark countries

Country	Key characteristics
Philippines[37]	• Under the Philippines PPP Law, VGF is a financial subsidy that government may provide for a revenue-based PPP to make fees affordable while improving the commercial attractiveness of the project, excluding costs of right-of way, resettlement and real estate taxes. • The Government or IAs may agree to: – Pay a portion of project cost, or – Bear a portion of capital expenses associated with establishing an infrastructure or development facility and/or any partial financing of the project or components. • Any direct government subsidy is limited to 50% of the project cost.

[34] Herbert Smith Freehills LLP, 2022, The Public-Private Partnership Law Review: Australia
[35] New South Wales Treasury, 2021, NSW Public Private Partnership Policy and Guidelines
[36] Herbert Smith Freehills LLP, 2022, The Public-Private Partnership Law Review: United Kingdom
[37] Republic of Philippines, 2022, Revised Implementing Rules and Regulations to Philippine BOT law

Country	Key characteristics
Australia	• IAs should consider capital contributions where there is potential to achieve greater value for money without compromising the project's performance, outcomes and risk allocation. For example, where there are liquidity constraints or where project costs could be reduced by lowering the level of private capital at risk during operations.[38] • Any capital contributions will modify the financial structure of the PPP. The IA will assess the proposed capital contributions on the: – Risk allocation. – Cost and complexity. – Preservation of the benefits of private finance. – Competitive tension. – Alignment of the tenor of finance with the PPP's risk profile. – Potential for innovation. • The IA may make a partial contribution through: – Milestone payments during the construction (e.g., where government cannot raise private capital to fund a project fully). – A lump sum payment once construction is complete to achieve greater value, and/or – A lump sum payment at a refinancing event during the project's operational phase to achieve greater value. • In NSW, government may consider making VGF contributions during and/or at the end of construction. VGF should only be made against key identifiable milestones subject to satisfying certain conditions. The State may make this decision if there are capacity constraints on the private debt and capital markets at the time, considering the size, complexity and estimated cost or value of the project's infrastructure and whole-of-life considerations.
India[39]	• India introduced 'the Scheme for Financial Support to PPPs in Infrastructure' (Viability Gap Funding Scheme) to support PPPs and address the infrastructure sector's lack of finance sources in 2006. Under this scheme, VGF is defined as a one-time or deferred grant to support the project commercially. • VGF grants are only available for infrastructure projects where the Private Partner is selected through an open competitive bid. The Private Partner is required to include the amount of VGF required to deliver the project in its bid proposal. The final VGF is determined through the bidding and negotiating phase. • The VGF grant will be paid during construction only after the Private Partner makes the equity contribution required for the project and will be released in proportion to debt drawdowns.

[38] Department of Treasury and Finance, 2017, Partnerships Victoria financing options
[39] Government of India, 2020, Scheme and Guidelines for forwarding proposals for financial support to Public Private Partnerships in Infrastructure under the Viability Gap Funding Scheme

Country	Key characteristics
	• VGF can total a maximum of 40% of the project's total capital cost, comprising up to 20% from the government's budget allocation and up to 20% from the IA's own budget. • If the project is terminated during the PPP Contract, the VGF may not be recovered from the Private Partner if it is retendered and continued as a PPP. If the project is terminated early and not continued as a PPP, then 90% of the grant paid under the scheme may be payable by the Private Partner back to the government.

7. Guiding Principles

7.1. In developing the contractual arrangements relating to GSM, IAs should consider the following.

7.2. As a starting position, the PPP should start on the assumption that no GSMs, including government guarantees and VGF, are required.

7.3. The IA should only consider providing government guarantees and VGF where it makes a PPP financially viable, bankable, and capable of undergoing construction and operations in a timely manner.

7.4. The need for government support should be identified early in the Feasibility Study. The provision of government guarantees and VGF is to be regarded as exceptional and aimed at PPPs with a solid economic justification, but which are not financially viable.

7.5. Any approved government support should be set at the minimum level of support necessary to ensure PPP viability.

7.6. Options to provide government guarantees or VGF should be written into the bid documents upfront during the Request for Bids phase so that bidders can fully consider and incorporate the requirements into their finance structures.

7.7. The IA and MEF should set up systematic reporting to monitor, account, and disclose all approved GSMs to appropriately manage fiscal risks.

7.8. The IA should ensure that it has adequate budget allocated to meet the requirements of any approved GSMs.

V. SITE

1. Overview

1.1. Most PPPs require land in order to deliver project outcomes, and site identification, availability and allocation are crucial steps in project development and contracting. Land may be needed as the site for a facility of some kind (e.g., a hospital, port or airport), necessary for the alignment of linear infrastructure (e.g., a road or rail line), or temporarily needed as a staging area for construction (and then released for other purposes once construction is complete).

1.2. Land issues during the project identification and prioritisation process include any potential requirement for land acquisition, access and timing, temporary additional land requirements during construction, resettlement issues, and environmental or social safeguards. The cost of land acquisition is a significant factor influencing the project's financial viability.

1.3. If land is not available at the construction start date, there can be significant risks in terms of delay and additional costs. These costs can include unplanned workforce demobilisation and remobilisation costs, financing penalties, and the need for alternative sites to store construction materials. In addition, it may be a compensation event for the Private Partner or, in extreme cases, grounds for termination of the project.

1.4. The conditions around land availability, the allocation of responsibilities, and risks for land issues should be assessed early and reflected in the PPP Contract. The PPP Contract should reflect the parameters (e.g., site coordinates, site condition, treatment of any pre-existing structures, etc.,) and clearly state each party's obligations concerning the site.

1.5. The resettlement and rehabilitation of affected people and compensation for acquired land/property may pose significant issues in project implementation. These issues may compound if indigenous people are on the land, noting that Cambodia is home to 24 indigenous peoples.[40]

1.6. Project delivery can be significantly impacted if land acquisition and ownership risks are not appropriately identified and managed. Examples of such issues and the associated consequences are set out in Table 6.

Table 6: Land acquisition and ownership issues in PPP Projects

Project	Issues	Consequences
Jakarta – Bandung High-Speed Rail (Indonesia)	• Low community consultation (EIA concluded in 7 days only). • Failure to acquire the land in accordance with Indonesian laws.	• Lenders (China Development Bank) refused to provide financing. • Project stalled.
Skyway 3 to LNEX (elevated toll road in Manila, Philippines)	• Lack of planning for land acquisition.	• Construction completion delayed.

[40] Indigenous territories include the forested plateaux and highlands of north-eastern Cambodia, where the majority live in the provinces Ratanakiri, Mondulkiri, Kratie, Stung Treng, Kampong Thom, and Preah Vihear.

Project	Issues	Consequences
	• The Private Partner needed to acquire the right of way itself.	• Costs of land acquisition increased.
Hanoi – Haiphong Expressway (Vietnam)	• Site clearance delayed. • Lack of planning between government institutions.	• Construction delayed. • Financing costs increased.
Philippines Orthopaedic Centre	• Certificate of possession not delivered. • Land owned by the wrong entity.	• The Private Partner decided to terminate the PPP Contract.
Delhi Gurgaon Expressway Project (India)	• The Government promised to provide land that had not yet been acquired and which proved difficult to acquire.	• Project completion delays.

1.7. Where land acquisition and resettlement are required, this will be undertaken by the General Department of Resettlement (GDR) under the MEF following the Expropriation Law and other applicable laws and regulations.[41] The GDR will work closely with the IA and Independent Consultant (IC) to review the proposed alignments or locations of the land to minimise the need for land acquisition and resettlement.[42] The procedure is determined by the PPP Contract which, under Article 35 of the Law on PPPs, should address:

– Land use rights.

– Allocation of costs associated with (a) the land acquisition, and (b) land use rights.

– Costs relating to the use of state asset(s) for PPP Projects.

1.8. The PPP Contract should address the costs of land acquisition and any other land use rights, the costs of land and other assets already owned by the Government that are used for the Project, and the rights related to land that are to be granted to the Private Partner.

2. Key Considerations

2.1. Land use rights

2.1.1. The PPP Contract should stipulate the ownership of the land and the rights of the Private Partner to develop the land/site for the project. The PPP Contract should also reference other relevant laws for allocating land for the PPP Project. For example, Private Partners in PPP Projects receive land use rights under the Land Law of 2001, which sets out the ownership regime of immovable properties in Cambodia. The contractual mechanisms for land allocation and any restrictions under the law should be clearly set out as an annexure to the main body of the PPP Contract. Noting that by the time the PPP Contract is drafted, the land for the project should have been appraised and identified. The risks related to the acquisition, approvals and any resettlement should also have been substantially managed.

[41] In relation to the power generation sector, the Ministry of Mines and Energy/EDC have their own separate procedures and acquire land independently of the GKC.
[42] Government of the Kingdom of Cambodia, 2022, SOP for PPP Projects, Volume I Policies and Procedures (Chapter VII, Paragraph 3.2.3)

However, any outstanding actions related to acquisition, clearances, and resettlement should be set out in the PPP Contract, with a clear allocation of responsibility.

2.1.2. Land rights issues involving indigenous groups would typically also fall under the responsibility of the IA. This includes the payment of compensation for land acquisition and resettlement to indigenous groups and addressing the associated social impacts.

2.1.3. In relation to land that is to be transferred by the Government to the Project, the PPP Contract will typically set out:

- That the Government will commence the official demarcation of the land comprising the Site and any rights of way, along with any necessary acquisitions, immediately upon the receipt of any deposits that may be required under the PPP Contract.
- That any land not currently owned by the Government will be expropriated by the Government through the Law on Expropriation (including the resolution of grievances initiated by landowners). This should occur expeditiously and in any case before the PPP Contract's Long Stop Effective Date.
- That all necessary rights on the site will be in place at the time the site is transferred to the Private Partner.
- That any competing rights that could materially and adversely affect the Project Management will have been removed by the time of that transfer (noting that the Government will act in accordance with applicable Laws in doing so).

2.1.4. In relation to the effective date of the PPP Contract, the acquisition of land is included as a condition precedent to the effective date, and acquisitions will take place after the PPP Contract is signed.

2.1.5. In relation to the Private Partner's rights, PPP Contracts will typically also cover:

- The date by which any land provided by the Government will be made available for the project.
- Permissible uses of the land to conduct activities for the purpose(s) specified in the PPP Contract.
- Title and ownership over fixtures and moveable assets (if there are any existing structures on the site).
- The protection of the Government's planning and development rights, which should not be restricted by the implementation of the PPP Project.
- The PPP Contract should also clearly state whether the IA will expect to take back the land at the end of the contract period.

2.2. Security Interests Over Land

2.2.1. The PPP Contract should also address the extent of the Private Partner's rights to establish security rights over project assets, including land. According to Article 33 of the Law on PPPs, the Private Partner may establish the following security rights on project assets or their benefits relating to the PPP Contract:

- Security over the movable or immovable asset(s) relating to the project owned by the Private Partner.

- Security over the pledge of proceeds or receivables of the Private Partner for the operation of the project assets(s) or the provision of services for users.
- Mortgage on rights related to land use in accordance with applicable laws and regulations.

2.2.2. The security interests granted must be limited to the extent of the Private Partner's interest in the land (i.e., if the land reverts to the Government at the end of the PPP, the Private Partner can only grant security over the land for the term of the PPP).

2.3. Allocation of Costs and Responsibility for Land Acquisition

2.3.1. The PPP Contract will stipulate the responsibility for funding land acquisition and associated resettlement.

2.3.2. In most jurisdictions, the Government retains the risks related to land availability and acquisition because it is best placed to manage the risks involved by using powers such as compulsory acquisition/expropriation, which are not available to the Private Partner. In Cambodia, the Government has the right to carry out expropriation for the implementation of public physical infrastructure projects for public and national interest, in accordance with the Expropriation Law.[43]

2.3.3. In relation to the cost of necessary land, these risks are often borne by the Government, as the Private Partner may build in significant contingencies to cover the risk of higher costs and uncertainties around timing if they are required to take the risk. Hence, it is often considered good practice for the Government to directly manage the land acquisition and/or retain the risk of land costs and potential delays in land becoming available. In Cambodia, a balanced approach is taken where the Private Partner bears the costs of land, but only up to a negotiated cap specified in the PPP Contract. The Government retains responsibility for costs over the cap. This provides scope for the value of the land to be financed, and the total cost of the project to be recognised, without placing undue risks on the Private Partner.

2.3.4. Site identification and clearance issues should be defined before the PPP Contract is signed. The PPP Contract should document the Government and Private Partner's obligations with respect to providing the site and minimise any ambiguities around future land acquisition or site clearance. Depending on the project structure, if the cost of land acquisition needs to be passed on to (or shared with) the Private Partner, such costs should also be set out in the PPP Contract.

2.3.5. According to the SOP for PPP Projects Volume II: Guidelines for PPP Projects, asset contribution (including land) is one of the possible types of government support.[44] The Private Partner will have the right to use land and assets for the duration of the PPP Contract, but the Government will retain the ownership. Refer to Section IV (Government Guarantees and Viability Gap Financing) for details on providing land as a form of GSM.

2.4. Costs relating to Using State Asset(s) for PPP Projects

2.4.1. Existing operational assets may be bundled with a new infrastructure facility under the same PPP Contract, which may accelerate the delivery of the PPP's services and possibly allow the Private Partner to benefit from early revenues generated by an

[43] Government of the Kingdom of Cambodia, 2010, Law on Expropriation

[44] Government of the Kingdom of Cambodia, 2022, SOP for PPP Projects, Volume II: Guidelines (Guidelines on Government Support Measures, Paragraph 2.3)

operational facility. This approach may improve the commercial and financial viability of the overall PPP Project. The provision of such assets by the Government could be another form of GSM on top of the provision of land, as outlined in SOP Vol II.[45]

2.4.2. For example, in a PPP Contract to construct a new urban road bridge, the Private Partner could be given the right to collect tolls from an existing operational bridge along with the new bridge to enhance the financial viability of the new bridge project.

2.5. Other considerations

2.5.1. Site Conditions

2.5.1.1. Site conditions refer to any existing physical conditions on, under or over the surface or in the vicinity of the site, such as:

- Groundwater and vegetation.
- Physical structures.
- Climate and topography.
- Contamination and pollution.

2.5.1.2. Adverse ground conditions can cause construction costs to increase and/or cause delays in the progress of works. Examples include:

- Cultural/archaeological finds.
- Unexploded bombs, land mines and other munitions.
- Pre-existing environmental pollution.
- Other site conditions that may need to be addressed to enable construction to proceed, for example, the removal of existing infrastructure.

2.5.1.3. In general, the risk of adverse site conditions should be allocated to the party with the greatest ability to control the probability of the risk occurring and minimise the impact of the risk on the project through effective risk assessments and well-planned responses.

2.5.1.4. The allocation can be to the IA (e.g., as a compensation event paying compensation to the bidder if the risk occurs), shared between the IA and Private Partner (e.g., as a relief event) or fully allocated to the Private Partner (with no compensation or relief for the adverse event). The detailed drafting of the allocation of different risks will depend on the specific commercial approach to the project and/or issues with the site. In terms of addressing site issues before the contracting process, the options for the IAs include:

- Undertaking detailed geotechnical and ground/soil surveys during the feasibility stage and disclosing such information as part of the bidding process. The work is usually undertaken by specialist consultants. This reduces the risk to both parties of discovering adverse site conditions later in the process and may reduce the risk premium required by bidders for assuming site risks. Having a single survey conducted can reduce the costs of the bidding process for all bidders.

[45] Government of the Kingdom of Cambodia, 2022, SOP for PPP Projects, Volume II: Guidelines (Guidelines on Government Support Measures, Paragraph 2.3)

- Allowing Private Partners to undertake their own surveys during the bidding process, which will involve giving them access to the site during the bidding process or before bidding commences. This removes any possible concern that the IA's surveys were inadequate or incomplete but increases the costs of bidding for all participants (who will then want to cover that cost in the cost of their bids), or
- Proceeding without a site survey. This is not recommended. If the risks are allocated to bidders, then they are forced to include risk premiums for unknown risks in their bids, which increases a government's costs, and/or their interest in the project may be reduced. If a government assumes these risks, it will be exposed to greater possible liabilities in the future.

2.5.2. Site Conditions, Site Management and Access

2.5.2.1. In general, the Private Partner will be responsible for site management, including:

- Ensuring minimal interference with the movement of traffic and obstruction/disruption to the area surrounding the site.
- Preventing or minimising nuisances, such as pollution, noise, dust, light emission, odour vibration or electromagnetic interference or disturbance.
- Managing traffic at the construction site.
- Managing the security of access to the site.

2.5.2.2. The PPP Contract should stipulate that the IA has reasonable rights to enter the project site during the contract period for inspection and/or testing.

2.5.3. Access to Utilities

2.5.3.1. Various forms of ancillary infrastructure, such as access roads, electricity substations, water connections, etc., are often needed for the Private Partner to deliver its obligations under the PPP Contract. In other cases, the project may have implications for existing infrastructure that will need to be addressed. For example, there may be an electricity line running across the site that needs to be diverted to enable construction for the project to proceed. The management of these ancillary infrastructure requirements needs to be considered in the context of the overall definition of the project, with the costs and risks allocated between the parties.

2.5.3.2. The Government may undertake various obligations as part of the PPP Contract, such as ensuring the availability of public services necessary for the Private Partner to perform its duties under the PPP Contract.[46] Often a government is the best party to deal with utility companies who may need to assist, especially if they are government-owned, as the Private Partner cannot force such companies to coordinate with the requirements of the project, and they are often monopolies who may potentially charge excessively to undertake specialist works.

2.5.3.3. Otherwise, if the ancillary infrastructure is to be provided by the Private Partner, this should be specified in the PPP Contract. The costs will form part of the costs of the project borne by the Private Partner that they will then need to cover through the price bid for the project. They may need to include a risk premium to

[46] Government of the Kingdom of Cambodia, 2021, Law on PPPs (Article 34)

address any complications that may arise from dealing with third-party utility companies.

3. Handover Planning

3.1. The handing over of land and/or other assets may be relatively simple or complex, depending on their nature. The Private Partner will require clear guidance on what (if anything) they will be provided with and therefore what they are responsible for building or acquiring, as this will be key to their assessment of the project's financial viability.

3.2. While the definition of the assets to be transferred is needed for planning and will need to be finalised in the draft PPP Contract that is issued to bidders, the timing and logistical details will normally be agreed post the appointment of the Private Partner in an asset handover plan. Similarly to asset handback (see Section XVII (Asset Handback)), an asset handover plan may include:

- The number, timing and sequencing of handovers across the PPP term.
- The scope of each handover (i.e., what will be transferred).
- The type of asset information to be included in the handover.
- The description of any activities required to be undertaken by the parties before handovers (e.g., training).
- The roles and responsibilities of the parties during handovers.
- The details of required notifications (e.g., agreed timeframes, information).
- The description of requirements for operational readiness following handovers.

3.3. If there are only limited assets to be transferred, or if the only asset being transferred is land, then some of these considerations will be minor or not required. If there are assets already in operation that will be transferred (e.g., under a concession for an existing airport), then the handover planning may need to be very extensive. The planning will need to take account of the fact that the actual handovers may take place some years into the future.

4. International Best Practice

4.1. Some comparable practices for the roles of government and private partners in land acquisition and managing site risks for PPP Projects in benchmark countries are set out in Table 7.

Table 7: Land acquisition - comparable practices in benchmark countries

Country	Key characteristics
Australia[47]	• The Government will undertake the compulsory acquisition of land, where necessary, to deliver the site and bear the costs and risks of the acquisition process. • For most projects, the government continues to own the land. This facilitates the transfer of control of the project assets to the government at the end of the contract term and underpins the government's step-in rights under the project agreement.

[47] Infrastructure Australia, 2008, National Public Private Partnership Guidelines Volume 3: Commercial Principles for Social Infrastructure

Country	Key characteristics
	• The allocation of responsibility for obtaining planning approval differs between jurisdictions, depending on the respective planning legislation. Jurisdictions will accept different obligations and risks based on the particular planning regimes applicable and depending on the project's unique circumstances. • The Private Partner will be responsible for environmental compliance and bear the risks relating to site conditions. An exception may be made in limited circumstances for latent geotechnical conditions and unidentified pre-existing contamination on a government-selected high-risk site. • The Government will assume responsibility for dealing with native title applications and claims. It is generally more effective and less costly for the government to accept the more significant part of native title risk as government is ordinarily better able to nominate and communicate with indigenous representatives to meet notification and consultation requirements under the Commonwealth Native Title Act 1993 and relevant State and Territory Aboriginal Land Rights legislation.
Indonesia	• The Government carries out land acquisition for PPP Projects. • Funds can come from the central or local Government and may be reimbursed by the Private Partner if the project is financially feasible. • The regulations are silent on the provision of appropriate rights of way for PPP Projects.
Philippines[48]	• For solicited projects, it is generally incumbent upon the government to provide the site. In the case of unsolicited projects or where the Private Partner proposes the site, the Private Partner may be in control of site selection. The Government may assist in acquiring the land if necessary. • The cost of land acquisition may be funded partly or fully by the Private Partner. The Government also has the option to require the Private Partner to advance the funds for land acquisition to be reimbursed subsequently by the government. • For site risks, such as unanticipated geological conditions and environmental contamination, the Private Partner bears the pre-identified risks and unidentified matters below the materiality threshold, which they are able to price into their bids. The Government should share in unidentified material risks for better value for money.

[48] Republic of the Philippines, 2016, Public-Private Partnership Centre, Generic Preferred Risks Allocation Matrix

Country	Key characteristics
Vietnam	• The Government is primarily responsible for land acquisition for PPP Projects, as land ownership in the country is vested in the state. • The Government can allocate or lease land to foreign-invested companies for a maximum of 50 years, which may be extended to 70 years in exceptional cases. • Although theoretically, foreign investors may be able to get land use rights via leases from the government, the process is cumbersome and generally not favoured. Instead, foreign investors often work with a local partner, such as obtaining a sub-lease from a local landlord who obtains the land use rights from the government, or acquisition of a project or a company established by a local partner who has secured land use rights.[49]

5. Guiding Principles

5.1. Project Planning Phase

5.1.1. During the project identification and prioritisation process, the IA should identify and consider the implications for the project program, cost and complexity of any potential requirement for land acquisition, site access and access timing requirements, temporary additional land requirements during construction, resettlement issues, and environmental or social safeguards.

5.1.2. The IA needs to consider land issues involving indigenous groups, including the potential need for compensation for land acquisition and resettlement and the management of any associated social impacts.

5.1.3. Site risks should be allocated to the party in the best position to control the probability of the risk occurring and minimise the impact of the risk on the project through effective mitigation strategies. For example, IAs can allocate the risk of unanticipated adverse ground conditions (e.g., hard rock or acid sulphate soils) to the Private Partner as they are usually in a better position to manage such risks. The Private Partner would typically bear responsibility for site management, such as environmental management, traffic management and site security, thereby incentivising project design, construction methodologies and programming that minimises the cost and complexity associated with these matters.

5.1.4. If pre-existing site risks are shared or allocated fully to the Private Partner, the IA should preferably undertake assessments of site risks during the project appraisal phase and disclose them to bidders as part of the bidding process. Alternatively, the IA can encourage Private Partners to undertake surveys before entering into the PPP Contract so that they can quantify their exposure to site risks. This may reduce the need for a risk premium to cover unassessed risks.

5.1.5. The provision of ancillary infrastructure, such as utilities and trunk infrastructure, may be undertaken by the Government, particularly where that infrastructure is owned or controlled by state-owned entities. If the Private Partner is required to

[49] D'Andrea & Partners, 2021, Land Use Rights for Foreigners in Vietnam

provide for or interface with ancillary infrastructure, it should be specified in the PPP Contract so that the Private Partner can factor the costs into their price bid.

5.1.6. Other than the provision of land, the IA should also assess whether there is scope for asset contribution, such as bundling of existing operational assets together with a new infrastructure facility under the same PPP Contract. This may allow the Private Partner to benefit from early revenues generated by an operational facility and improve the commercial and financial viability of the overall PPP Project.

5.1.7. The GDR will undertake any required land acquisition and resettlement, working closely with the IA and IC to review the proposed alignments or locations of the land to minimise the need for land acquisition and resettlement. Output-based contract specifications may be relevant to incentivise bidders to develop innovative project designs that lessen their physical footprint.

5.2. PPP Contract Drafting

5.2.1. The PPP Contract should reflect the site parameters (site coordinates, site condition, treatment of any pre-existing structures, etc.) in as much detail as possible to allow Private Partner to price their bid accurately.

5.2.2. IAs should clearly set out the contractual mechanisms for granting of land rights to the Private Partner and any restrictions under the law in the PPP Contract.

5.2.3. The PPP Contract should also ensure that each party's obligations concerning the site are clear, so that the potential for disputes is minimised. This includes:

- Private Partner’s land use rights, including:
  - The date by which any land provided by the Government will be made available for the project.
  - Permissible uses of the land to conduct activities for the purpose(s) specified in the PPP Contract.
  - Title and ownership over fixtures and moveable assets (if there are any existing structures on the site).
  - The protection of the Government’s planning and development rights, which the implementation of the PPP Project should not restrict.
- Allocation of costs associated with (a) the land acquisition, (b) land use rights.
  - Costs relating to using state asset(s) for PPP Projects.

5.2.4. The PPP Contract should specify any outstanding actions related to acquisition, clearances, and resettlement, with a clear allocation of responsibility between the Government and Private Partner. The PPP Contract should also stipulate when delays in making land available to the Private Partner can culminate in a compensation event or provide grounds for termination of the project.

5.2.5. The PPP Contract should address the extent of the Private Partner’s rights to establish security rights over project assets, including land.

5.2.6. The IA should also ensure that the PPP Contract safeguards the IA’s rights to enter the project site during the contract period for inspection and/or testing.

VI. INDEPENDENT CONSULTANT

1. Overview

1.1. Pursuant to the SOP for PPP Projects Volume III: Procurement Manual, an IC may be engaged to provide independent review, monitoring, approval and reporting of the implementation and/or operations and maintenance of the project scope.

1.2. Hiring an IC can benefit a project by providing:

- Technical expertise: An IC with appropriate technical expertise can help to ensure that the project is being executed in accordance with industry standards and best practices and in accordance with the agreed technical design stated in the PPP Contract.
- Objectivity: An IC is not affiliated with the IA or Private Partner, which allows them to provide an unbiased assessment of the project and identify any potential issues or risks.
- Flexibility: An IC can be hired on a flexible basis, meaning they do not need to be engaged for the full length of the project. This allows for flexibility in terms of cost and allocation of resources.

1.3. The IC is typically jointly appointed by the IA and Private Partner at or around the time of Financial Close as they will often have responsibilities during the initial design phase of the project.

1.4. The role of the IC is to act independently while providing the following services:

- Helping to ensure that the project follows relevant regulations, laws and standards.
- Providing ongoing assessments of the project's delivery and helping identify any potential issues or risks that affect the project.
- Identifying potential risks associated with the project and recommending measures to mitigate those risks.
- Providing quality assurance for the project to ensure that the work is being done to the required standard.
- Re-assessment and assurance of VfM outcomes.[50]
- Providing validation and reporting to lenders and other third parties as required, which can increase the confidence of stakeholders and investors in the project.
- Advising on whether the Private Partner is meeting its obligations under the PPP Contract.
- Advising on possible relief for the Private Partner in the event of a relief event, termination or force majeure (for a general discussion of these topics, refer to Section XI (Relief and Compensation), Section XVI (Termination of PPP Contract), and Section XII (Force Majeure).
- In the event of a step-in, advising both parties on technical issues related to the event (for a general discussion on this topic, refer to Section XV (Lenders Step-in Rights)).

[50] Government of the Kingdom of Cambodia, 2021, Standard Operating Procedures for PPP Projects Volume III: Procurement Manual Annexures, page 295

1.5. The IC may have a role in both the Construction Phase and Operations Phase of a project. Guidance regarding the IC's role during each Phase is outlined in the following subsections.

2. IC's Role During the Design and Construction Phase

2.1. The IC's detailed responsibilities during this Phase may include:

- Reviewing and certifying that the Private Partner has completed the detailed engineering design in accordance with the PPP Contract specifications prior to the commencement of construction.
- Reviewing the Private Partner's progress related to the project schedule and the compliance of the construction with the detailed engineering design and the Minimum Performance Standards and Specifications (MPSS).
- Reviewing the proposed construction methodology of any variations. Additionally, the IC can assess the level of fault (if any) attributable to the Private Partner or Construction Contractor where a variation or other event has caused a delay.
- Advise on mitigations proposed by the parties to events that may arise (e.g., variations, compensation events) in order to reduce cost or time impacts on the construction program, and avoid or minimise subsequent impacts on operations.
- Monitoring 'trial runs' of elements of the construction in advance of further commissioning activities.
- Monitor and report on all tests required during and after construction.
- Identifying the potential for delays that may affect the project's planned operational commencement date.
- Advising the Private Partner and/or the IA on the Private Partner's obligations relating to the protection of the environment.
- Mitigating any conflicts of interest, whether perceived or realised. For example, these can arise if there are corporate linkages between consulting engineers responsible for the certification of works and the entity that constructs those works. The IC can provide independent input to reduce the impact of these situations.
- Issuing or reviewing the certificate of practical completion and certifying the transition to the Operations Phase.
- Determining whether a default has occurred under the PPP Contract.

3. IC's Role During the Commissioning and Operations Phase

3.1. The IC's responsibilities during this Phase may include:

- Ensuring commissioning works have been performed in accordance with the PPP Contract specifications.
- Advising when the Private Partner has failed to meet the PPP Contract's operational performance standards. The IC may then propose reasonable pathways forward to ensure compliance from the Private Partner.
- Assessing and certifying whether the PPP asset has met the PPP Contract's handback conditions upon the expiry of the Operations Phase (see Section XVII (Asset Handback)), in accordance with the SOP for PPP Projects Volume II:

Contract Management Guidelines. If the conditions are not satisfied, the IC can report on the works that should be carried out for the conditions to be met.

– Determining whether a default has occurred under the PPP Contract.

4. IC Considerations

4.1. Key drivers and considerations for procuring and engaging with an IC in benchmark countries are:

4.1.1. Independence

4.1.1.1. An IC should be selected and jointly appointed by the IA and Private Partner through a transparent process. Independence provides added comfort to all stakeholders and improves the efficiency of project operations.

4.1.1.2. An IC should not have any conflicts of interest that a reasonable person may regard as giving rise to the possibility of bias in favour of any party (including any subcontractors to the Private Partner). For example, a consultant that is a related entity to the design and construction contractor should not be appointed to act as the IC. Should a conflict of interest arise, the IA should consider implementing safeguards to preserve the greatest level of independence of the IC achievable in the circumstances or consider replacing the IC.

4.1.1.3. It is advisable that IAs perform adequate due diligence on the company structures of the Private Partner, the subcontractors and the IC to ensure that there are no corporate linkages. This is particularly the case in Cambodia, where the market for private PPPs and technical providers is still relatively small.

4.1.1.4. In terms of tendering, a party that is related to a bidder for the Private Partner role could potentially bid for the IC role, subject to an understanding that the IC role can only be awarded to them if the related party is not awarded the main PPP Contract as the Private Partner, in order to preserve the independence of the IC role.

4.1.1.5. IAs should ensure that the IC's scope and agreement align with Cambodia's Anti-Corruption Law and that all parties declare any perceived or actual conflicts of interest.[51]

4.1.2. Role in Disputes

4.1.2.1. If the IC's role extends to participation in resolving disputes, IAs should consider:

– Specifying a time frame in the PPP Contract by which the advice from the IC is required (e.g., 20 business days from service of the notice).

– The extent of the IC's role, which typically only extends to providing advice and guidance and not to making determinations.

– The possibility of installing the IC within the project's governance arrangements. For example, the parties could agree to establish a Senior Management Group made up of relevant executives from the Private Partner's consortia, the IA and the IC to address any disputes. The IC could participate in the Senior Management Group to provide advice and a neutral view on the position of the parties.

[51] Enacted 19 April 2010.

- Whether the opinions of the IC should be advisory or binding on the parties. In many markets the IC's role is not binding, but the parties generally treat the assessments with seriousness unless an error can be identified. Under SOP for PPP Projects Volume I: Policies and Procedures, the IC's determinations of whether a default has occurred are specifically identified as non-binding.

4.1.3. **Scope Change (Variations)**

4.1.3.1. IAs should consider ensuring that the roles and responsibilities of an IC with respect to changes in scope (typically in the form of a variation procedure) are clearly set out in the PPP Contract.

4.1.3.2. ICs can assess variation cost proposals prepared by the Private Partner and potentially offer advice on further mitigating the impact of the variation on delays and/or cost. For example, if it is proposed that a variation will result in a delay to a project's commencement date, the IC can independently assess whether the delay is fairly a consequence of the variation and/or suggest solutions to reduce the variation's impact.

4.1.4. **PPP Asset Management**

4.1.4.1. Proper maintenance and upkeep can also reduce the risk of asset failure, which can result in costly downtime and repairs. The IC can play a significant role in ensuring that the PPP assets are operated and maintained to the standard in the PPP Contract.

4.1.4.2. An IC can also make recommendations regarding improvements to operations to make them more efficient, as they are focused solely on the specific asset and can bring a specialised perspective to the issue.

4.1.4.3. They may also have a role in assessing the condition of the assets as part of the hand-back process (see Section XVII (Asset Handback)).

4.1.5. **Local Understanding**

4.1.5.1. Cambodia is a relatively new market for PPPs, and Private Partners may be internationally based with limited in-country experience. A local, qualified IC can play a vital role in ensuring that a project is designed and constructed in accordance with Cambodian laws, regulations, and customs.

4.1.5.2. They should have a working understanding of local market conditions, including the availability of resources, labour, and materials. Specific scope to assist may include:

- Assessing compliance with local regulations: ICs can comment on the Private Partner's plans for meeting local regulatory standards, such as building codes and zoning laws.
- Identifying local risks: ICs can provide a local perspective on risks and issues, such as labour disputes, natural hazards, and political instability. Improved risk definition may support more accurate risk pricing and the development of specific mitigation strategies.
- Understanding local resources: ICs can comment on the deliverability of the Private Partner's plans for locally sourced materials and labour, which may be relevant to assessments of cost and timing.

4.1.6. **Cost of the IC**

4.1.6.1. The cost of hiring an IC can vary depending on a number of factors, such as the size, complexity, and location of the project, as well as the specific services required.

4.1.6.2. Under the SOP for PPP Projects Volume III: Procurement Manual, in Part II, the IC is required to be hired under a time-based contract, in which their costs are calculated based on the work undertaken.

4.1.6.3. Some factors that can affect the cost of hiring an IC include:

- Project size and complexity: Larger and more complex projects will typically require more extensive services from ICs, which can result in higher fees.
- Services required: The specific services to be provided by the IC will impact the cost. For example, a project that requires extensive review and testing of equipment and systems will be more costly than a project that only requires a basic review.
- Location: The location of the project is a vital factor in the IC's fee. Projects in remote or difficult-to-access locations may require additional resources and expenses, which can increase the cost.
- Experience and qualifications: ICs with more experience and specialised qualifications may charge higher fees than those with less experience and qualifications.
- Duration of the project: The project's duration affects the costs of the IC, as a longer duration will require more time and resources.

4.1.6.4. Although the costs of an IC may be reasonably material in the context of any given project, these are often justified by the value of the additional assurance they can provide over project timeliness, quality and budget.

4.1.7. **Funding the Cost of the IC**

4.1.7.1. Pursuant to the SOP for PPP Projects Volume III: Procurement Manual, in most cases, the cost of the IC is priced by the Private Partner into its bid project cost.

4.1.7.2. Where the IC is required to undertake new scope (e.g., to assess the impacts of a variation), the general rule is that the party initiating the new scope should initially bear the costs involved.

4.1.7.3. The final disposition of the costs will then fall into one of three scenarios:

- If the variation proceeds and the costs were initially borne by the Private Partner as the initiating party, then the Private Partner recover them through the payment structure for the variation.
- If the variation proceeds and the costs were initially borne by the IA as the initiating party, then the Private Partner can repay those costs to the IA and then recover them through the payment structure for the variation.

4.1.8. **Monitoring and Performance Evaluation**

4.1.8.1. The IC's performance in its role should be managed by a contract administrator, similarly to any other services contract. As the IC is typically jointly procured by the IA and Private Partner, this function can be shared between the IA and the Private Partner, given that the IC is ostensibly providing services to both parties.

The IA and the Private Partner may wish to agree on a clear governance protocol where there is disagreement on the IC's performance.

4.1.8.2. Similarly, to the PPP Contract itself, a dispute resolution hierarchy should be considered (for instance, if the parties' representatives cannot agree, the dispute would escalate to senior executives of the IA and the Private Partner, and subsequently, to a more formal dispute resolution mechanism such as mediation).

4.1.8.3. Effective monitoring of the IC starts with clear expectations. The IC contract should have a clear terms of reference setting out the IC's specific roles, against which the contract administrator can assess compliance or fulfilment.

4.1.9. **Disaster Risk Reduction and Climate Change**

4.1.9.1. Climate-resilient design and construction elements are increasingly forming part of major infrastructure projects (discussed in Section IIs (Project Bankability). ICs should be adequately experienced to advise on issues raised by such elements, including required standards and the technical specification defined by the IA.

4.1.9.2. The IC should also demonstrate competence in performance monitoring of climate-specific indicators during the construction and operating phases in addition to traditional indicators, particularly where those indicators are linked to the provision of concessional finance.

4.2. Case Study 6 and Case Study 7 illustrate the role of the IC in PPPs:

Case Study 6: Daang Hari-SLEX Link Road (Philippines)[52]

The Daang Hari-SLEX Link Road is a four-kilometre four-lane toll road project in the Philippines. The project is a Build-Operate-Transfer PPP and has been operational since July 2015.

A variation was required during the project's Construction Phase related to the acquisition of remaining land that had not been acquired before the commencement of construction.

An IC was appointed jointly by the IA and the Private Partner, who contributed equally to the IC's costs. The IC was charged with a duty of care to both parties to act professionally and independently. The specific tasks included certifying the progress of the works and making recommendations for the IA's approval of all documents relating to the project's Construction Phase.

After the completion of the preliminary design, it was discovered that there was a planned expansion of a nearby causeway, causing the need for a change in the scope of the project, and the IA initiated a variation notice. The IC certified that the proposed variation was in accordance with the minimum performance standards and specifications agreed upon at contract execution. The Private Partner subsequently prepared a proposal setting out the necessary details and the additional cost estimates (with supporting particulars), including how the costs would be recovered.

Negotiations with the owners to acquire some areas of the project land were unsuccessful, and a court order had to be obtained. This process resulted in delays in completing the work, requiring further oversight from the IC. As the IA was responsible for land acquisition risk, this delay had no financial impact on the Private Partner. No Extension of Time (EOT)

[52] Global Infrastructure Hub, Daang Hari-SLEX Link Road - PPP Contract Management

for construction works was required, as the issue associated with the outstanding land acquisition led to only minor delays.

In this instance, the IC acted as a mediator to prevent disputes as they offered an impartial evaluation of the land acquisition issues, which was then presented to the parties for agreement. The IC supported reaching a timely agreement between the parties involved.

Case Study 7: Operating Water Infrastructure Using PPPs (Vic, Australia)[53]

Private Partners in the water sector typically submit monthly reports setting out their operational performance and compliance with service standards and eligibility for service payments, along with details of their compliance with their obligations under the PPP Contract to maintain assets.

Coliban Water (A water utility company in Bendigo, Victoria) received monthly condition reports for assets from their Private Partner, including an asset management plan requiring an independent facility condition assessment.

Coliban Water used an IC to ensure that the project assets were being maintained in accordance with the PPP Contract. The IC specifically investigated various aspects of performance, including whether:

- Core services were being delivered to the contracted standard.
- The condition of the assets was being managed effectively.

The IC identified specific areas for improvement in relation to the project's financial management and contract administration.

5. Guiding Principles

5.1. The IC Contract should include a Terms of Reference specifying tasks that will need to be carried out by the IC.

- For solicited proposals, this TOR would typically be developed by the IA's TA (see SOP for PPP Projects Volume III: Procurement Manual).
- For unsolicited proposals, the TOR could be developed by the Private Partner, with the IA reviewing and negotiating the TOR assisted by any TA advising the IA or a specialist advisor recruited for that task.

5.2. Generally, IAs should consider ensuring that the IC is experienced and certified with relevant guidelines, standards and procedures that apply in Cambodia and as dictated by the specifications of the PPP Contract.

5.3. The role of the IC should clearly be stipulated in the PPP Contract. Examples of these provisions would likely include:

- That the IC should assist the IA in responding to requests in a timely manner.
- That the IC should act professionally and independently of the parties to the PPP Contract. The IC should not depart from its fiduciary duty to act impartially.
- That the IC should exercise the standard of care, skill, and diligence expected of an expert professional service provider.

[53] Victorian Auditor-General's Report, 2013, Operating Water Infrastructure Using Public Private Partnerships

- That the IC should be independently jointly appointed by the IA and Private Partner to avoid a perception that the IC is biased in favour of the party appointing them.
- The fees for the IC should be paid by the Private Partner, according to the SOPs.

VII. DELAY

1. Overview

1.1. Timely delivery is a high priority in the construction of infrastructure projects and is emphasised in both Articles 34 and 39 of the Cambodia PPP Law. Article 34 outlines the Private Partner's obligation to deliver construction and operations in a timely manner, while Article 39 outlines the Private Partner's obligation to ensure that the quality and quantity of goods and/or services are procured within the time limit agreed upon as stipulated in the PPP Contract.

1.2. The Private Partner's primary obligations under a PPP Contract are to:

- Regularly and diligently carry out the design and construction activities.
- Achieve provisional acceptance by the date set in the PPP Contract.
- Achieve each progress milestone by the relevant progress milestone date.
- Expeditiously and diligently progress the required work to achieve final acceptance.

1.3. The Private Partner should take all reasonable steps that a prudent, competent and experienced contractor would take to minimise the potential delay's effects, consequences and duration. The responsibility for 'on-time' delivery typically lies with the private sector, except in specific circumstances, typically known as 'qualifying causes of delay'.

1.4. Regardless of risk allocation, in practice, it is not uncommon for the Private Partner and/or IA to experience delays in implementing a PPP Project, which can extend the operational commencement date of the project and ultimately varying levels of loss for the Private Partner and/or IA.

1.5. The Private Partner may suffer losses in revenue and/or additional costs that it would otherwise not experience if the planned commencement date is not achieved. The IA or Private Partner may be subject to liquidated damage or delay claims, and the Private Partner may have performance bonds or other forms of security called in by the IA, and third parties may experience delays in potentially critical infrastructure not being delivered on schedule. These issues are discussed in further detail in Section 3 (Key Considerations for Managing Delay).

2. Types of Delay

2.1. Due in part to the scale and complexity of projects typically delivered via a PPP, delays can occur due to a wide range of factors, including:

- Prolonged contract negotiations or decision-making prior to contract award affecting the program.
- Force majeure.
- Inadequate experience and skills of the Private Partner.
- Supply chain issues.
- Failed land acquisition and/or delays in gaining planning, environmental clearances and other permits.
- Poor contract management, design errors or the Private Partner misrepresenting

the IA's requirements.

– Unforeseeable circumstances in delivery, such as climate change, pandemic or industrial relations and civil commotion.

2.2. These examples are not exhaustive. Delays are most commonly experienced during the construction phase, as this is where the most activity and complexity occurs, but they can also occur during the operating period.

2.3. Delays can extend the dates for project completion with implications for compliance with the PPP Contract. Delays can also cause increases in costs associated with both construction and operations.

2.4. Determining the responsibility for these costs may often result in disputes which are typically managed through a dispute resolution process set out in the PPP Contract (PPP Contract delay dispute resolutions is explained in Section XIII (Dispute Resolution)).

2.5. The types of delay considered in a PPP Contract are set out in Table 8.

Table 8: Delay – types of delay in a PPP Contract

Delay type	**Description**	**Eligibility**	
		Extension of time	**Compensable**
Non-critical	Delays that do not affect the overall project commencement date.	✗	✗
Critical and non-excusable	Delays that occur on the critical path and therefore affect the overall project commencement date. The Private Partner is typically at fault and has to re-baseline the schedule at its own cost. This may include delays caused by the Private Partner's supply chain.	✗	✗
Critical, excusable, and non-compensable	Delays that affect the project commencement date and have been caused by factors outside of the control of both the Private Partner and IA, such as inclement weather. These delays are typically excusable and may be eligible for an EOT. However, these delays do not typically entitle the Private Partner to additional costs.	✓	✗
Critical, excusable, and compensable	Delays that occur on the critical path and therefore affect the overall project commencement date. However, the Private Partner is typically not at fault and, therefore, may be eligible for an EOT and/or additional costs to be reimbursed to the Private Partner.	✓	✓

2.6. Case Study 8 highlights the types of delays that an IA may be challenged with during the implementation of a PPP Project.

Case Study 8: Delhi Gurgaon Expressway (India)

- The Delhi Gurgaon Expressway (DGE) project proposed to change a busy section of the highway connecting Delhi to Gurgaon into an access-controlled divided carriageway consisting of six to eight lanes.[54] The PPP was awarded in 2008 and soon experienced delays linked to scope change and land acquisition issues.
- The PPP Contract stated that the risk of delays to the project commencement date was to be borne by the Private Partner, even for causes outside of its control. Each week the Private Partner failed to complete the project's construction after the scheduled completion date, the Private Partner was obliged to pay prescribed weekly damages of 0.01% of the total project cost.[55]
- The key lessons learned and observations from this project include:
  - Land acquisition: due to the densely populated location of the motorway, there were areas of land that were difficult to acquire. This exposed the Indian Government to the risk of not providing the land within the required timeframe, which impacted the overall schedule of the program. To avoid delays of this nature, governments should consider addressing these issues before the procurement process reaches a financial close.
  - Support from key project stakeholders: for large-scale infrastructure projects, the government needed to have public support. There was no open, continuous communication with the public to gain support for land acquisition and road expansion activities. The Government should consider being proactive in engaging with affected individuals to help foster trust within the community and reduce community resistance. Ensuring adequate public support can help to minimise some community resistance risks that can lead to delays.
  - Governance: approval processes can be time-consuming and complex. A clear governance structure that outlines approval processes to help better understand timeframes can help prevent delays caused by lengthy and/or uncoordinated approval processes.
  - Recent investigative work: traffic risk is typically the biggest risk to the viability of toll road projects. To adequately plan the delivery of the project and reduce the risk of delay, recent data and viability studies should be used to ensure the project meets the community's needs.
  - Contract management: governments should plan for effective contract management protocols to help ensure the project is tracking on the program and delays are mitigated early.

3. Key Considerations for Managing Delay

3.1. PPP Contracts often provide a list of specific events or causes, known as 'relief events', for which the Private Partner is protected against events outside of the Private Partner's control that may result in delay. PPP Contracts usually contain clauses with

[54] Public Private Partnerships in India, Delhi Gurgaon Expressway
[55] Public Private Partnerships in India, Delhi Gurgaon Expressway

respect to the timing of project milestones and delivery to manage the risk of delay and determine if the delay has been caused by a 'relief event'. 'Relief events' are further detailed in Section XI (Relief and Compensation). These may include:

3.1.1. **Extension of Time Clause**

3.1.1.1. An EOT entitles the Private Partner to claim an extension to the date for completion for specified causes.

3.1.1.2. Three broad requirements should be considered for the Private Partner to be entitled to an EOT, including the following:

- **Qualifying cause of delay**: The PPP Contract typically lists the causes of delay for which the Private Partner is entitled to claim an EOT. They generally include:
    - Events caused by or within the control of the IA (this may include variations to the scope of work and/or delays in IA or other government approval processes).
    - Events beyond the control of either party and for which the Private Partner is unable/unwilling to bear the risk, such as force majeure and/or inclement weather outside of the norm.
- **Effects of a qualifying cause of delay**: Although there may be a qualifying cause of delay, the Private Partner is required to show that the cause has actually prevented them from meeting their timing obligations and that the delay is not due to some other irrelevant matter(s).
- **Procedural requirements**: To claim an EOT, the Private Partner will typically have to comply with a formal notification process. For example, the Private Partner will generally be required to notify the IA of the event giving rise to a delay as soon as practicable or within a pre-specified number of days after it becomes aware of the delay.

3.1.1.3. The PPP Contract usually places an obligation on the Private Partner to take all reasonable steps that a prudent, competent and experienced contractor would take to mitigate, minimise or avoid the effects of a project delay. Failure to do so can reduce or eliminate the claim for an EOT.

3.1.1.4. The Private Partner may also be eligible for compensation as well as an EOT, depending on the type of delay experienced. For example, if the IA fails to obtain the necessary approvals for the Private Partner to be able to meet its obligations, many markets consider this eligible for both delay compensation as well as an EOT.

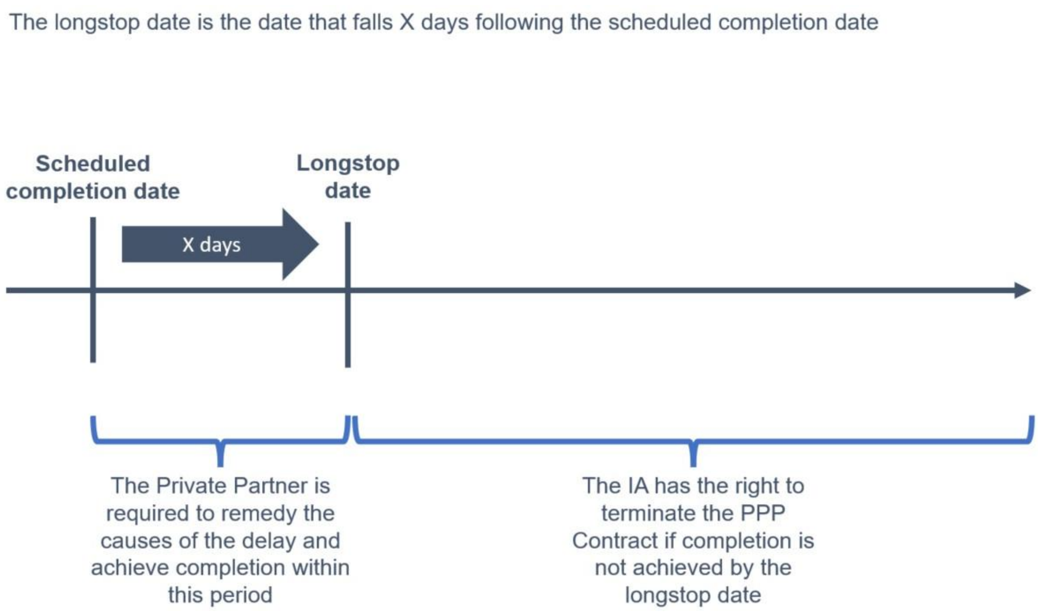
3.1.2. **Longstop Date**

3.1.2.1. There can be circumstances that delay the project commencement date to a point where it is unreasonable for the parties involved to continue the obligations of the PPP Contract. The PPP Contract mechanism that manages this risk is a longstop date.

3.1.2.2. A longstop date is the latest date by which the Private Partner must achieve completion. If completion is delayed beyond this date, the IA may begin the process to terminate the PPP Contract. The longstop date is usually defined as a date occurring a specified number of days after the scheduled completion date. The granting of an EOT normally results in a corresponding adjustment to the longstop date.

3.1.2.3. An illustrative example of a long stop date is set out in Figure 1

Figure 1. Delay – longstop date



3.1.3. **Construction Bonds**

3.1.3.1. A construction bond typically takes the form of an on-demand bank guarantee which the IA can call upon should PPP Contract triggers be met, such as the Private Partner not reaching the project commencement date on time or due to the Private Partner failing to rectify extended delays.

3.1.4. **Private Sponsor Support**

3.1.4.1. Private Sponsor support in the context of managing project delays refers to undertakings from one or more of the Private Sponsors of the Private Partner to support meeting the PPP Contract obligations. This may include providing technical support and/or general undertakings to ensure that the Private Partner reaches project completion on time.

3.1.4.2. Private Sponsor support is typically only triggered if the Private Partner experiences a delay that leads to it failing to reach its scheduled completion date on time.

3.1.5. **Liquidated Damages**

3.1.5.1. The PPP Contract may provide for liquidated damages as a payment representing a genuine pre-estimate of the actual losses or damages suffered if the Private Partner fails to meet its contractual obligations, such as achieving the commencement date on time. There are often specific rules in the PPP Contract regarding how they may be claimed.

3.1.5.2. The daily rate of liquidated damages is often calculated from the financial model, equating to forgone revenue, increased financing costs and any other losses that the IA or Private Partner suffers as a result of the delay. In other jurisdictions, the Private Partner may bid a daily rate evaluated and contemplated in the PPP

Contract for delay costs payable to the Private Partner for delays when the IA agrees on entitlements for an EOT.

3.1.5.3. If a rate for liquidated damages is not specified, then a difficult and costly dispute can ensue, which bidders may regard as a risk to be reflected their bids.

3.1.5.4. Further information on liquidated damages is set out in Section XI (Relief and Compensation).

3.1.5.5. Case Study 9 showcases an example in which liquidated damages were sought for a PPP Project in Victoria, Australia.

Case study 9: West Gate Tunnel (Victoria, Australia)

- In 2014, the Government of Victoria received an unsolicited proposal for the West Gate Tunnel project, a 14-kilometre transport road infrastructure project to link parts of Melbourne via a twin tunnel. The contract was signed in 2015.[56] In 2019, the Private Partner discovered contaminated soil along the tunnel alignment.
- The contamination caused both project delays and significantly increased costs. While the Victorian Government's Environment Protection Authority was open to exploring safe reuse options for the soil, further testing was required. The Private Partner could not access some private property or under roads for the testing, which resulted in the Private Partner being unable to commence tunnel boring activities and pausing the project.
- The Private Partner claimed it was confronted with a force majeure event, an unforeseeable circumstance that made it impossible to fulfil the terms of the PPP Contract because of difficulties in disposing of contaminated soil. The Government responded that no force majeure event had occurred and that the Private Partner was not entitled to terminate the PPP Contract.
- The project came under increasing public scrutiny regarding its business case, procurement process and the quality of the site investigation work.
- The dispute continued to escalate while the project faced substantial overruns in costs and further delays. After two years of negotiations, a deal was made for Transurban (one of the Private Partners) to contribute AUD 2.2 billion towards costs, while CPB and John Holland (two other Private Partners) would give up all of their profit margins and make significant losses. Despite the liquidated damages paid by the Private Partner, the government still incurred additional costs of AUD 1.9 billion and faced further delays to the completion date.
- This case study highlights the importance of the planning and development stage of the project, the need for clarity in the PPP Contract and the importance of building strong relationships with the Private Partner to limit disputes when issues arise.

4. International Best Practice

4.1. Some comparable practices for the management of delay risk in comparable countries are set out in Table 9.

[56] Swinburne University, 2020, West Gate Tunnel delays show risks of mega-projects

Table 9: Delay - comparable practices in benchmark countries

Country	Key characteristics
Australia	**National PPP Guidelines:** • Approaches to delayed delivery may include: – Providing an EOT to the operational commencement date, should a relief event occur during the design and construction phase of the PPP Project. – Extending the longstop date by the same number of days by which the operational commencement date is expected to be extended by. This is only relevant when an excusable delay has occurred. – Eroding the Private Partner's operating term as a result of late achievement of completion, therefore reducing the service fee (where there is a fixed concession period, or the operating term is a fixed period from the date for completion). – Applying liquidated damages for the period of delay to defray delay costs (where no erosion of the contract term is expected). The Government will typically not seek to charge liquidated damages for late delivery in addition to the erosion of the operating period. However, this may be necessary if the potential delay costs are greater than the aggregate of the service fee payments it will not incur as a result of the reduction of the operating period. **Partnerships Victoria PPP Projects, Department of Treasury and Finance:** • If a delay claim is valid, contractual processes should be followed. The Partnerships Victoria guidelines include a number of conditions where the Private Partner may be entitled to an EOT.[57] To be eligible for an EOT, the Private Partner must: – Submit a delay claim within a specified period. – Ensure that the delay caused by the relief event or compensation event has or will actually cause a delay to activities on the critical path. • Usually, the Victorian Government's liability to the Private Partner for a valid claim will be reduced to the extent that the relief or compensation event was caused or contributed to by the Private Partner, or the Private Partner fails to mitigate the effects of the delay. • The Private Partner must report potential delays to the Victorian Government through the appropriate process outlined in the PPP Contract.

[57] Partnerships Victoria, 2018, Contract Management Guide

Country	Key characteristics
South Korea	• **Negotiation and contract award**: Any delay between the appointment of a preferred bidder and the contract award may increase project costs, resulting in a higher fee or government subsidy. To prevent the delay, the government must adequately prepare project plans and a detailed Request for Proposal (RFP) before initiating the bidding process. If negotiations fail to be completed within the specified time period, countermeasures should be taken, such as initiating a negotiation with the next preferred bidder, re-posting the RFP, or nullifying the award of the PPP Project.[58] • **Managing delay during the project implementation period:** To prevent delay during procurement, authorities are required to complete the settlement of administrative impediments, including civil petitions through consultation with relevant stakeholders, before they commence negotiations with concessionaires. • **Concession Termination:** The concession period may be terminated if the Private Partner fails to reach project completion by the scheduled project commencement date due to an inexcusable delay event.

5. Guiding Principles

5.1. In developing the contractual arrangements relating to delays, IAs should consider the following:

- IAs should effectively control the risk of delays by implementing efficient procurement processes, making provision for the treatment of delay in the PPP Contract, undertaking quality control, and encouraging the Private Partner to track and mitigate the risk of delays.
- The PPP Contract should contain EOT and liquidated damages clauses to help protect the IA from losses caused by delays.
- Good contract management can help IAs prevent, reduce or mitigate the risk of delays by promptly identifying problems with the program.
- The Government should consider encouraging transparency with the Private Partner through risk registers and regular meetings. This transparency will help identify project issues and ways the IA can work with the Private Partner to address risks early, which will help mitigate the risk of delay.

5.2. Upon initiation of delay claim or EOT, the Private Partner has an obligation under the PPP Contract to take steps and measures to mitigate delays and alert the IA of any potential project issues, including delays.

5.3. If the Private Partner submits a delay claim, the IA should review, assess and negotiate in accordance with the process outlined in the PPP Contract.

[58] Asian Development Bank, 2011, Public–Private Partnership Infrastructure Projects: Case Studies from the Republic of Korea, Volume 1: Institutional Arrangements and Performance, Asian Development Bank

5.4. The IA should engage an IC to assess complex delay claims. The IC can advise the IA advice on whether there is merit to the claim and if costs are reasonable and supported with sufficient evidence.

5.5. The IA may have a claim for liquidated damages if a delay occurs, but the IAs should consider establishing and maintaining strong relationships with the Private Partner to prevent disputes. Liquidated damages should only be considered as a last resort, and the IAs should focus on encouraging the Private Partner to deliver the project on time.

VIII. REFINANCING

1. Overview

1.1. Refinancing involves changing the lenders and/or terms of lending for a project during the PPP term (i.e., after the project's financial close). The existing loans are generally repaid, and new loans issued. There may be a distribution to the equity investors as a result. The Private Partner normally has the power to decide to refinance, but contracts may also allow a government to require refinancing in some circumstances.

1.2. Refinancing can involve one or more of:

- A change to the debt pricing.
- A change of the debt maturity (its tenor).
- A change in the amount of debt.
- A change in the amount of debt relative to equity (i.e., the gearing ratio).
- Changed reserve account requirements (e.g., debt service reserve account).
- The release of guarantees provided by the equity investors or third parties of the Private Partner.
- A change in the security arrangements (e.g., share charges, project asset security, etc.).
- A change to the repayment terms (including when capital is required to be repaid).
- A change in the lenders or debt providers.
- A change in other finance terms (e.g., loan covenants).[59]

1.3. Any changes to the financial structure of the Private Partner can affect the financial integrity of the project. For example, refinancing can raise additional debt, increasing the project's debt-to-equity ratio and/or increasing a government's contingent liabilities. If refinancing results in benefits, these were partly the result of a government's decision to grant a PPP in the first place, entitling a government to share in them.

2. Refinancing in General

2.1. The term 'refinancing' usually refers to refinancings that were not specifically contemplated at the time of financial close but arise when circumstances permit or require. References to refinancing in this section will refer to this type of refinancing except where clearly noted.

2.2. The government has interests in such refinancings, and PPP Contracts often include provisions setting out:

- A requirement for the Private Partner to notify and seek consent from the IA before any form of refinancing.
- The treatment of costs incurred by the IA in relation to refinancing.

[59] Global Infrastructure Hub, PPP Contract Management: Refinancing

– A procedure for calculating and distributing any gains from refinancing between the Private Partner and the IA.

2.3. IAs generally lead the discussions and assessments on refinancing, but MEF is likely to play a crucial role in overseeing the process, given the specialised nature of some of the considerations.

3. Exempt Refinancing

3.1. If a refinancing is planned in advance as a part of the financial closing negotiations, then they are called Exempt Refinancings.

3.2. Exempt Refinancings may involve:

– A refinancing that is specifically identified and considered in the financial model and the calculation of the Private Partner's payments.

– An amendment to a financing agreement (either a change to quantity, terms or frequency) and the exercise by lenders of their rights in the ordinary course of loan administration, or

– The movement of monies between project accounts in accordance with the terms of the financing agreements. [60]

3.3. Exempt refinancings can be negotiated as part of the financial closing process on terms agreeable to the parties, and do not necessarily have to conform to the provisions of this section

4. Key Drivers and Considerations for Refinancing

4.1. Refinancings are often a response to changing conditions in relation to a project or market conditions, or to address limitations in the availability of long-term financing.

4.1.1. If the market or the project improves, a refinancing may allow the project to improve returns. For example, once a project has completed construction and/or has shown a good track record during operations, its overall risk profile has improved, and it may be able to negotiate for a lower cost of debt.

4.1.2. If the Private Partner is financially distressed, it may need to refinance to avoid insolvency. As there are often no gains from improved financing terms in this scenario, and the project's continued viability may depend on the refinancing, the IA's involvement may be limited to assessing and approving the proposed changes.

4.1.3. In some markets, long-term financing may not be available for the entire duration of the PPP Contract. This is common in emerging markets but in some developed markets as well, such as Australia. In such cases, a refinancing is a likely solution (while not necessarily meeting the definition of an Exempt Refinancing that can be fully planned for in advance).

4.1.4. In some markets, a bridging loan may be used at a financial close to finance the project in the short-term position until a long-term financing option can be arranged. A bridging loan will typically only take a Private Partner a few years into the construction period and may be treated as an Exempt Refinancing in some cases.

4.1.5. Case Study 10 highlights the opportunity a successful refinancing may offer.

[60] Law Insider, Exempt Refinancing Definition

Case Study 10: Theun Hinboun Hydropower Lao PDR (Lao PDR)[61]

- Theun Hinboun was the first project built for the export of Lao power to Thailand, under an MOU signed between the two governments in 1993. Completed in 1998, the 120 MW project sells nearly all its output under a long-term PPA to the Electricity Generating Authority of Thailand (EGAT). It was developed under a BOOT model, the Sponsors being two Nordic utilities and MDX of Thailand. The public power utility in Laos, EDL, has a 60% shareholding.
- The refinancing raised USD 152 million, mainly in baht on the local Thai market, on more favourable terms than the original borrowings. The money was used to refinance part of the original debt, and to release USD 55 million to shareholders through a capital reduction that increased the debt-equity ratio to 70/30.
- As a result of the refinancing and the strong dividend stream, the shareholders recovered the nominal value of their original investment within four years of commercial operation. The project is also producing royalties for the Lao Government, currently worth around USD 4 million/year.
- As the refinancing was undertaken when the project was able to demonstrate a profitable track record, the negotiating position of the Private Partner was much stronger than it was at the original financing.

4.2. The responsible agencies, IA and MEF, should consider proposed refinancings based on two key aspects:

4.2.1. **Government Interest in Refinancing Decisions and Consent**

4.2.1.1. Most PPP Contracts require consent from the IA and MEF before initiating a refinancing process. Some of the key considerations from an IA's perspective include:[62]

4.2.1.1.1. If a refinancing involves better terms, such as lowering the cost of debt, increasing the leverage or extending the repayment profile, then the financial benefits to the project may be considerable. The sharing of refinancing gains allows the IA to participate in these benefits.

4.2.1.1.2. A change in the quality and integrity of lenders providing the debt finance has the potential to change the financial integrity of the Private Partner, the project and the project's agreed risk allocation. These could positively or negatively affect the interests of the IA and the Government.

4.2.1.1.3. Changes in the risk allocation can have a positive or negative effect on the project's VfM.

4.2.1.1.4. There may be gains or losses from ending existing hedging or swap arrangements. If there are gains, they form part of the refinancing gains. If there are losses, called hedging break costs or swap break costs, these reduce the gains from refinancing.

4.2.1.1.5. Changes to the source of financing could change the risk for the project. For example, if the Private Partner refinances with foreign currency debt, they should either hedge the foreign currency exposure, or the greater exposure to

[61] The World Bank, 2006, The Financing of Water Infrastructure: A Review of Case Studies
[62] Global Infrastructure Hub, PPP Contract Management: Refinancing

foreign currency risk should be considered as part of evaluating the advantages and disadvantages of the refinancing. If a foreign debt is replaced with domestic financing, then the reduction in foreign currency risk and/or the cost of foreign currency hedges should be accounted for in the refinancing benefits.

4.2.1.1.6. Additional debt due to a proposed refinancing could result in the Private Partner becoming highly leveraged. Changes to gearing could potentially make the project riskier and less financially robust.

4.2.1.1.7. Changes to protections around cash flow, such as amending the repayment terms or changes to a debt service reserve account requirement, could leave the Private Partner in a more or less financially robust position. There could be impacts on the deliverability of the Project and the IA's objectives.

4.2.1.1.8. Changes to the quality and integrity of lenders providing debt finance could positively or negatively affect the IA's interests from a risk, reputational or national strategic perspective.

4.2.1.1.9. As there is typically a mix of benefits and issues, all relevant circumstances should be considered when deciding whether to support a given refinancing at the time it is proposed.

4.2.1.2. Due to the complexity surrounding most refinancing events, many markets advise responsible agencies to seek legal and commercial advice to ensure that the benefits and risks are thoroughly assessed prior to consenting to any refinancing.[63]

4.2.1.3. Case Study 11 investigates refinancing principles in PPPs.

Case Study 11: Theun Hinboun Hydropower Lao PDR (Lao PDR)[64]

- The estimated cost was USD 306 million, but after saving USD 40 million, mainly on the construction, the final cost was USD 270 million. As a result of this cost saving and the Asian Financial Crisis (AFC), the originally planned debt-equity ratio of 75/25 eventually became 55/45.
- The Thai banks, which were to supply about half of the debt, were unable to meet their drawdown obligations during construction due to the AFC. Consequently, the Sponsors had to find more equity and raise more USD funds, so the baht facility represented less than 30% of the debt.
- Refinancing took place after four years of commercial operation when the project could demonstrate a profitable track record and the construction risk was past. The main purpose was to reduce currency exposure by realigning the currency of the debt to match the revenue and to achieve a capital reduction through a debt for equity swap.

4.2.2. Sharing Refinancing Gains

4.2.2.1. Where a refinancing event increases or accelerates distributions to investors, these effects are referred to as 'Refinancing Gains'.

[63] New Zealand Infrastructure Commission Te Waihanga, PPP Practice Note: Expectations and Guidance for Refinancing Events

[64] The World Bank, 2006, The Financing of Water Infrastructure: A Review of Case Studies

4.2.2.2. A gain is the result of a refinancing where the Private Partner's debt costs are reduced, resulting in greater revenue and in turn, a higher equity return. Refinancing gains can only exist if refinancing results in A – B being greater than zero, where:

- A = the present value of the distributions to equity Investors projected looking forward to reflecting the terms of the proposed refinancing.
- B = the present value of the distributions to equity Investors projected looking forward without considering the terms of the proposed refinancing.
- A refinancing can be viable despite a calculated gain equal to zero if the financing terms are more desirable.

4.2.2.3. PPP Contracts generally provide that any gains from refinancing should be shared equally between the IA and the Private Partner.

4.2.2.4. Some refinancings may be excluded from the general sharing mechanism. Exempt Refinancing's are the primary example. Another example that can sometimes arise is where the bidder has included a future refinancing in their financial modelling, but there is not sufficient certainty of when and how it will occur to justify writing it into the contract as a full Exempt Refinancing. The government has still arguably received the benefit of such a refinancing in the initial bid, as the bidder assumed it in coming to its overall pricing for the transaction and should not necessarily expect to receive further benefits if and when it occurs. This is clearly an area for potential confusion and dispute. The Private Partner should clearly explain their position on such refinancing's in their bid, and the parties can then negotiate their preferred approach.

4.2.2.5. The typical sharing mechanism normally involves one or a mix of:

- A lump sum payment to the IA.
- A reduction in service payments paid by the IA (for an availability PPP).
- A reduction in the amounts that the PPP can charge its customers (e.g., for a toll road).
- A reduction in any revenue guarantee provided by the Government.
- Other alternative exchanges of value, such as reducing the term of the project.

4.2.2.6. The PPP Contract should specify the preferred sharing mechanism and provide for the IA and MEF to determine the specific form of the sharing if the PPP Contract allows for alternatives. Care should be taken to model the commercial and financial impacts to ensure that the value of the gains to be shared is equal to the value of the amounts actually shared through the sharing mechanism, considering discounting for time and risk.

4.2.2.7. Case Study 12 incorporates key characteristics of refinancing gain.

Case Study 12: Fazakerley Prison Services Limited Gain Share (UK)[65]

In December 1995, the Prison Service (public sector) awarded Fazakerley Prison Services Limited (FPSL – private sector) the Private Finance Initiative (PFI) contract to

[65] National University of Singapore, 2012, Model for Negotiation of Refinancing Gain from Public-Private Partnership

build a new prison at Fazakerley near Liverpool. The period of this contract is 25 years, and the estimated contract value was (Great British Pounds) GBP 247 million. The Fazakerley prison opened in December 1997, five months ahead of schedule.

The financing for the project comprised bank borrowings and a mixture of subordinated debt and equity capital investment by Group 4 and Tarmac.

Due to the success in construction and operation, as well as the increasing confidence in the financial markets towards PFI projects, the project was successfully refinanced in November 1999.

The refinancing gain share was approximately 2/3 to Group 4 and Tarmac and 1/3 to the Prison Service, respectively.

5. International Best Practise

5.1. Government Interest in Refinancing Decisions and Consent

5.1.1. Some comparable practices to government interest in refinancing decisions and consent in benchmark countries are set out in Table 10.

Table 10: Government Consent - comparable practices in benchmark countries

Country	Key characteristics
Australia - Partnerships Victoria	• PPP Contracts require government's consent for all proposed refinancings. • Management of refinancing consent is centralised in the Department of Treasury and Finance (DTF), where the subject matter expertise resides. • Other Australian governments mostly align with this approach.
UK - Standardisation of PF2 Contracts	• The latest guidelines on the HM Treasury's 'Standardisation of PF2 Contracts' (SoPC) provide that the Private Partner shall obtain the authority's consent for any refinancing. • The government can consider the risk and VfM implications of refinancing before giving its consent to proceed. • Additional consent from government is required if refinancing increases its liabilities upon termination of the project.[66]
New Zealand	• The PPP Practice Note developed by the New Zealand Infrastructure Commission details restrictions whereby no change to financing agreements (this may include termination / amendments / replacement of the existing agreements, or the entry into new agreements) can increase government's liabilities on termination.[67] • The government's consent is required for proposed refinancing events that involve changes to: • The senior debt repayment profile. • Re-gearing, and/or

[66] HM Treasury, Application Note — Value For Money in Refinancing,
[67] New Zealand Infrastructure Commission Te Waihanga, PPP Practice Note: Expectations and Guidance for Refinancing Events

Country	Key characteristics
	• A change in senior lenders to lenders that were not pre-qualified during the tender process and/or do not meet appropriate criteria relating to financial quality and reputation.
South Korea	• Refinancing is defined as the process of changing the project consortium's equity structure, investment share, debt financing condition, etc. • Refinancing a project requires the approval of interested parties. The Private Partner is required to notify the IA on refinancing and related plans in advance, and report on the progress of refinancing at all times. • The Private Partner should do its best to obtain fair market prices and conditions for refinancing through reasonable and bona fide competition. • For a national (central government-managed) project that has gone through deliberation by the PPP Review Committee, the IA is required to consult with the Public and Private Infrastructure Investment Management Centre (who advises on the refinancing) and the Ministry of Strategy and Finance.[68]

5.2. **Sharing Refinancing Gain**

5.2.1. Some comparable practices for refinancing gain in benchmark countries are set out in Table 11.

Table 11: Refinancing gain - comparable practices in benchmark countries

Country	Key characteristics
Australia - Partnerships Victoria	• Gains are shared equally between the Private Partner and government. • The government's share in a refinancing gain is paid as a lump sum or through a reduction in ongoing service payments (for availability PPPs). • Any losses from prior refinancings suffered by the Private Partner can be deducted from subsequent refinancing gains before gains are shared with the IA.[69]
UK - Standardisation of PF2 Contracts	• In the 'Standardisation of PF2 Contracts', the sharing distribution can be divided into 50%, 60% and 70% according to different amounts of refinancing gain.[70]
New Zealand	• The government is entitled to receive 50% of any refinancing gain. • The government does not share any refinancing losses.

[68] Asian Development Bank, 2011, Public–Private Partnership Infrastructure Projects: Case Studies from the Republic of Korea, Volume 1: Institutional Arrangements and Performance
[69] Partnerships Victoria, 2017, Partnerships Victoria financing Options
[70] HM Treasury, 2007, Standardisation of PF2 Contracts, Version 4

Country	Key characteristics
	• The government's share of the refinancing gain can be received: – Through a single payment reduction (i.e., upfront), or – Spread across several unitary payments (i.e., over time).[71]
South Korea	• Under the PPP Act, the IA is supposed to share the refinancing gains. • The IA can use its share of the refinancing gains to either lower user fees, lower the minimum revenue guarantee level provided by government or reduce the concession period. • The government's PPP agency is expected to review and validate the financial models, the refinancing gain estimation, and the alternatives for using the refinancing gains before negotiation.

6. Guiding Principles

6.1. For the PPP Contract

6.1.1. The PPP Contract should specify that the IA and/or the MEF's consent is to be sought for all non-exempt refinancing events so that an impact assessment on the Government's interests can be undertaken.

6.1.2. The PPP Contract should clearly set out the specific process to govern refinancing, addressing the sharing of information by the Private Partner (including the rationale for the refinancing), the timetable for consent and the criteria for government decision-making.

6.1.3. The PPP Contract should specify that the Government's consent will not be unreasonably withheld or delayed.

6.1.4. The Government and the Private Partner should agree on any Exempt Refinancings to be excluded from sharing.

6.1.5. In evaluating a proposed refinancing, IAs should review all of the potential impacts on the project, the Private Partner and the Government's interests. The IA should consult MEF throughout the refinancing process.

6.1.6. The IA together with the MEF should consent to a refinancing if it considers the benefits to the Government of refinancing will outweigh any negative impacts or risks. If this is not met, the Government holds the right to refuse the consent in the event of any risk increase to the Government.

6.2. For Refinancing Gains

6.2.1. PPP Contracts should provide for 50:50 sharing of refinancing gains.

6.2.2. The PPP Contract should stipulate that the Government is not responsible for any refinancing losses. However, any such losses can be deducted from subsequent gains (without any grossing up for time value) before calculating amounts to be shared.

6.2.3. The PPP Contract should stipulate anticipated refinancing assumptions (i.e., discount rate, interest rate etc.) to avoid subsequent negotiation or disputes. These

[71] New Zealand Infrastructure Commission Te Waihanga, [PPP Practice Note: Expectations and Guidance for Refinancing Events]

assumptions should be based on a Public Sector Comparator benchmark at the time of the initial PPP Contract.

6.2.4. The PPP Contract should provide for how disputes will be treated if the parties cannot agree on the basis for calculation or the payment method for the gain.

6.2.5. IAs should oversee and implement any refinancing and advise on the proposed calculation of the value of gains and the sufficiency of the specific sharing mechanism proposed. MEF will also be closely involved in any refinancing process to support IAs in negotiating with the Private Partner.

IX. CHANGE IN LAW

1. Overview

1.1. Article 27 of the PPP Law stipulates that PPP Contracts are subject to Cambodia's applicable laws and regulations. Failure by the Private Partner to comply with the applicable laws and regulations could result in the Government having the right to terminate for Private Partner default.

1.2. Article 30 states that the PPP Contract shall specify the conditions for changes to the PPP Contract, including changes in law. The conditions for changes to the PPP Contract must comply with the SOP for PPP Projects Volume II: Guidelines on Contract Management.

1.3. When submitting a bid, the Private Partner will generally factor in the cost of complying with the applicable law that is current and foreseen at the time of entering the PPP Contract.

1.4. During both construction and operations, there is the risk that a change in law or regulation impacts the project, such as changes in general corporate taxation or rules governing specific sectors such as public transport or health. For example, a change in safety, construction or environmental standards could require significant capital expenditure for new or more expensive works. At the same time, Private Partners should not necessarily be protected from changes in law affecting all businesses, such as changes in tax law, as it should be generally understood that laws can change over time.

1.5. As future changes in law can be difficult to predict, the PPP Contract should allocate the risk of such changes between the Government and the Private Partner. In some circumstances, the Private Partner will be entitled to relief and/or compensation. If relief or compensation is appropriate under the PPP Contract, the change in law is referred to as a qualifying change in law.

2. Change in Law Provisions in PPP Contracts

2.1. At the stage of preparing the PPP Contract, it is usual to include provisions setting out:

2.1.1. The Definition of a Qualifying Change in Law

2.1.1.1. The definition of law usually includes legislation and subordinate regulations and may include court decisions that set or overturn a precedent.

2.1.1.2. The IA should engage legal advisors to ensure that the drafting is clear and that there is no ambiguity. A change in law in the ordinary meaning of the phrase is only a qualifying change in law if it meets the definition in the PPP Contract.

2.1.1.3. Where a change in law does not meet this definition, typically, the Private Partner is not entitled to relief and/or compensation.

2.1.2. The Timing Restrictions around Qualifying Changes in Law

2.1.2.1. The PPP Contract should stipulate the date from which a change in law is relevant. This is typically the contractual close or the date that bids are submitted.

2.1.2.2. In addition to bids needing to reflect the law as of this fixed date, no relief is normally available for foreseeable future changes, as the Private Partner should have factored these into its decision to proceed.

2.1.3. The Distinction between the Categories of Changes in Law

2.1.3.1. A general change in law affects the general course of all or a very broad range of businesses. Examples include changes in tax and environmental legislation.

2.1.3.2. A specific change in law usually does not affect the general course of all or most businesses, only the specific sector in which the Private Partner operates (e.g., public transport, roads, education, and health), or

2.1.3.3. A discriminatory change in law usually applies expressly to the PPP Project and the Private Partner.

2.1.3.4. Some jurisdictions may combine specific and discriminatory changes into a single category: different categories may be considered qualifying or non-qualifying, depending on the commercial requirements of the project, as further explained in Section 3 (Allocation of Risk of Qualifying Changes in Law)

2.1.3.5. Generally, the IA should avoid agreeing to compensate for the broadest types of law changes, such as changes in tax rates.

2.1.4. **The Notification Process for Potential Qualifying Changes in Law**

2.1.4.1. The provision should set out the process that the IA follows to notify the Private Partner when it becomes aware of a potential qualifying change in law that could impact the project, project activities or the project documents.

2.1.5. **The Process to Determine that a Qualifying Change in Law Has Occurred, and any Resulting Modifications**

2.1.5.1. The Private Partner would be required to submit a notice to the IA detailing the change, the effect of the change on the project, mitigating factors, details of costs and saving implications and any changes to the scope and form of the PPP Contract it is seeking.

2.1.5.2. The IA would consider the notice, the parties would discuss if required, and a determination would be made.

2.1.6. **The Mechanism of Resolving Disputes Regarding the Definition or Effect of a Qualifying Change in Law**

2.1.6.1. A dispute may arise if the qualifying change of law provisions are unclear on the definition, which party bears the risk and what relief is available or sufficient.

2.1.6.2. Where there is a dispute regarding a potential qualifying change in law, a typical PPP Contract will document a series of escalating dispute resolution procedures. These dispute resolution clauses aim to promote the resolution of disputes through less costly and more time-efficient means than through the judicial system.

2.1.6.3. Dispute resolution more generally is further discussed in Section XIII (Dispute Resolution).

2.1.7. **The Scope of Relief and/or Compensation Available to the Parties**

2.1.7.1. Qualifying change in law provisions generally provide the Private Partner with relief from contractual breach to the extent compliance with the new law affects the Private Partner’s ability to perform its obligations.

2.1.7.2. Qualifying change in law provisions also identifies how to treat any resulting costs or modifications to the PPP Contract scope. Treatment varies depending on the category of changes in law and the PPP Project circumstances.

2.1.7.3. Relief and compensation are further discussed in Section XI (Relief and compensation).

2.2. Case Study 13 investigates new fire safety legislation in the UK that could be a qualifying change in law for PPP Projects.

Case Study 13: Fire Safety Legislation (UK) [72]

- In June 2017, a fire broke out in the Grenfell Tower, a 23-storey tower block in West London, UK, and 72 people tragically died.
- In October 2019, the Grenfell Tower Inquiry published its Grenfell Tower Inquiry Phase 1 report.
- In response to the inquiry, the UK Government amended the Regulatory Reform (Fire Safety) Order 2005 by introducing new regulations under article 24 (Fire Safety Order).
- Regulations made under article 24 can impose requirements on responsible persons or others, including building owners and building managers, in relation to mitigating the risk to residents for specific premises.
  - Buildings subject to the amendment include those that may be operating as part of a PPP. New responsibilities of building managers include regularly inspecting lifts and reporting the results to local fire and rescue services.
  - Ensuring evacuation plans are reviewed and regularly updated, and personal evacuation plans are in place for residents whose ability to evacuate may be compromised.
  - Ensuring residents are provided with fire safety instructions in a form that they can reasonably be expected to understand.
  - Ensuring individual flat entrance doors, where the external walls of the building have unsafe cladding, comply with current standards.
- For PPP Projects established before the Fire Safety Order, this could potentially be a qualifying change in law necessitating the assessment and allocation of the costs of compliance, depending on whether it is considered specific (applying to the property sector) or general (given that property is a very broad sector of the economy). For new PPPs, bidders will anyway be expected to price their bids taking account of the new rules, and so no change in law issue should arise in these cases.

3. Allocation of Risk of Qualifying Changes in Law

3.1. The key consideration is which party bears the risk, (i.e., the consequences of a qualifying change in law). This risk is often differentiated according to whether the change is general, specific or discriminatory.

3.2. Bidders and their lenders are generally concerned that changes in law are outside of their control and can cause material impacts on a project. Accordingly, they want the Government to take responsibility for them. On the other hand, IAs want to ensure that the circumstances where a change in law can impact the cost of the PPP Contract are kept to a minimum, both to save costs and also as a policy principle

[72] Addleshaw Goddard LLP, 2020, Change of law in the context of changes to fire safety legislation

that the Government is entitled to change laws (in general) without paying compensation to affected parties, possibly for a large number of projects, in each case.

3.3. Different markets have generally taken three broad approaches to the allocation of qualifying change in law risk.

3.3.1. **No risk sharing**

3.3.1.1. The Government bears all the risks of qualifying changes in law and provides full relief to the Private Partner.

3.3.1.2. This approach is often seen in developing markets that need to encourage bidder interest.

3.3.2. **Limited risk sharing**

3.3.2.1. The Private Partner accepts risk up to a certain monetary threshold, with the Government bearing the remaining risk. A cap can be established as a percentage of the original investment or an absolute figure. This enables the Private Partner to price the risk it bears on a limited basis.

3.3.2.2. This approach has been seen in more developed markets such as New Zealand and some emerging markets.

3.3.3. **Specific risk sharing**

3.3.3.1. The Government accepts the risks of discriminatory changes and sometimes specific changes as well, with the Private Partner bearing other change in law risks. In some jurisdictions, the Government will pay for capital expenditure for general changes in law during the operating period.

3.3.3.2. This approach is often considered preferable as it sometimes avoids complex negotiations when general changes in law are promulgated, noting that bidders may price some contingency for assuming the risk of general changes. This approach is seen in experienced PPP markets, such as the UK and Australia.

3.4. How risk is allocated between the parties should be considered with reference to the project's bankability, Cambodia's legal environment, and the project model.

3.5. Where the project is a user-pays model (e.g., toll roads), the Private Partner may be able to pass on changes from qualifying general changes in law to end users, making it appropriate for the Private Partner to retain general change in law risks. For example, if the cost of complying with applicable environmental law increases, the Private Partner has the flexibility to raise the toll price to cover the additional cost in a user-pays model.

4. Relief and Compensation

4.1. The Private Partner may be entitled to:

- **Relief from breach**: the Private Partner would be protected from breach of the PPP Contract to the extent that:
  - Performance is prevented or delayed by a qualifying change in law, or
  - Modification of the project scope is required to comply with a qualifying change in law.

- **Cost compensation**: any entitlement to compensation for qualifying changes in law or policy is often set out in a schedule annexed to the PPP Contract. This will depend on the payment model and could include, for example:
  - An increase in the availability payment paid by the IA.
  - An increase in the toll or tariff paid by end users.
  - Reducing any fees payable by the Private Partner, or
  - A lump sum payment to the Private Partner.
- **EOT for performance**: if the qualifying change in law event occurs during construction, the Private Partner will usually be entitled to an EOT for meeting key dates, such as the scheduled date for commencing operations, to the extent any delay is attributable to the qualifying change in law. An extension to the term of the PPP Contract may be considered (where applicable).

4.2. To access the relief and/or compensation previously mentioned, the Private Partner is generally required to demonstrate:

- **Direct causation**: there needs to be a direct link between the qualifying change in law and the proposed consequences.
- **Mitigation:** the Private Partner is required to do what they reasonably can to mitigate costs or delays related to qualifying change in law.

4.3. There may be circumstances in which a qualifying change in law results in cost savings, and the PPP Contract should allow the Private Partner to share any such benefits with the IA. For example, a change in regulation may allow the Private Partner to meet the technical requirements using less material. The IA should benefit from any positive financial consequences (i.e., cost savings) that may ensue. As with other changes in law, consideration should be given to whether benefit sharing should apply to general, specific and/or discriminatory changes, and preference should be given to a symmetrical approach.

5. Disaster Risk Reduction and Climate Change Considerations

5.1. Legislative and policy responses to climate change can be anticipated to accrue or change globally in the coming years. These changes are unpredictable but are likely to affect planning policy, the prescription or prohibition of certain building materials and/or construction techniques, and the mandating of certain design elements.

5.2. Like any other change in law, the allocation of risk associated with delay or cost impacts as a result of these changes will need to be negotiated between the Private Partner and the IA.

5.3. It may be appropriate, where future policy or legal change can be anticipated, to ‘pre-agree’ certain variations to the scope of the PPP Project in question. For example, if a mandate of certain climate resilient materials or design is being considered by government (but is not yet required as at commercial close), the contract may include a ‘pre-agreed’ variation to the specification to allow for that material or design. In this way, the time and cost associated with replacing that material would still be negotiated as part of the competitive process.

6. International Best Practice

6.1. Some comparable practices for how change in law provisions operate in benchmark countries are set out in Table 12.

Table 12: Changes in law - comparable practices in benchmark countries

Country	Key characteristics
Australia - Partnerships Victoria[73]	• The standard PPP Contract differentiates between general and specific changes in law and how the risk is shared. • Relief and/or compensation are available for general and specific changes in law subject to exclusions that are 'business as usual' risks that the Private Partner should accept such as changes to taxation. **General Changes in Law** • The allocation of risk of general changes in law differs during construction and operations. • Given that the construction phase represents a relatively short period of time during the term, the Private Partner is considered to be able to assess the likelihood and bear the risk of such general changes in law during construction. • The IA retains the risk of general changes in law during the operational phase. The changes are treated as an IA-initiated modification, with relief and compensation to the Private Partner in accordance with the PPP Contract. Compensation may include fresh construction costs, services costs and margin. The Private Partner is also entitled to an EOT if the change meets the requirements for an extension event. **Specific Changes in Law** • The IA will compensate the Private Partner for project-specific changes in law and changes in policy, as they are primarily within government's control. This may comprise construction, services, margin costs and extensions of time where the requirements are met under the PPP Contract.
UK - Standardisation of PF2 Contracts[74]	• The UK has three categories for qualifying changes in law: discriminatory, specific and general. • Law is defined as the legislation, any guidance or applicable judgement of a relevant court of law which changes a binding precedent. • When the IA bears the risk of a qualifying change in law, the Private Partner has a duty to mitigate and keep any cost increases to a minimum. • Any compensation payable under a change in law provisions is by way of an adjustment to or reduction in the unitary charge.

[73] Partnerships Victoria, 2018, Availability PPP PV Standard Project Deed – Guidance Notes
[74] HM Treasury, 2012, Standardisation of PF2 Contracts

<table>
<tr><th>Country</th><th>Key characteristics</th></tr>
<tr><td></td><td>

The UK adopts a sharing approach where the Private Partner generally accepts the risk of general changes in law and the IA bears the risk of discriminatory and specific changes in law.

General Changes in Law

During the construction phase, costs arising from general changes in law are allocated to the Private Partner.
The IA is responsible for general changes in law during the operating period that were not foreseeable at the date of the PPP Contract and that involve capital expenditure. All other operating period general changes in law are allocated to the Private Partner.
The operating costs from general changes in law are also protected through indexation provisions in the PPP Contract. In some cases, there may also be provisions to benchmark or market test charges.

Specific and Discriminatory Changes in Law

The IA bears the risk of any costs arising from all discriminatory and specific changes in law during both the construction and operating periods.

</td></tr>
<tr><td>New Zealand[75]</td><td>

The standard PPP Contract differentiates between general and specific changes in law. A specific change in law is defined as any change in law which expressly and exclusively applies to the PPP Project, the facility or site, the Private Partner or a specific sector. A general change in law is one that is not a specific change in law.
The Private Partner must provide evidence that it has mitigated the effects of any changes in law.
The Private Partner must propose the allocation of all of the financial consequences (both positive and negative) of the change in law as either capital or operating consequences.
The base cash flows that qualify for compensation are set out in the following table:

<table>
<tr><td>General change in law</td><td>Cumulative capital expenditure.
Operating expenditure.</td></tr>
<tr><td>Specific change in law affecting a sector (but not targeting a specific project)</td><td>Net capital consequences.
Net operating consequences.</td></tr>
<tr><td>Specific change in law affecting a specific project</td><td>Net capital consequences.
Net operating consequences.</td></tr>
</table>
</td></tr>
</table>

[75] New Zealand Infrastructure Commission Te Waihanga, 2013, Standard Form Public Private Partnership (PPP) Project Agreement

Country	Key characteristics
	• The payment of compensation is based on a formula in some circumstances, while in others it is based on one party fully compensating the other, as set out in the following table:

	Change is a net cost to the project	Change is a net benefit to the project
General change in law	Formula applies, IA pays compensation.	Formula applies, Private Partner pays compensation.
Specific change in law affecting a sector (but not targeting a specific project)	Formula applies, IA pays compensation.	Private Partner pays 100% of the net benefit.
Specific change in law affecting a specific project	IA pays 100% of the net cost to the Private Partner.	Private Partner pays 100% of the net benefit to the IA.

Country	Key characteristics
	• Where the formula applies, it is based on two thresholds defined in the PPP Contract for each base cash flow category (e.g., cumulative capital expenditure). If the total value of the change is below the first (lower) threshold, the Private Partner is required to bear all of the impacts. If the total costs are above the second (higher) threshold, the IA is required to bear all of the impacts. If the total costs are between the two thresholds, costs must be shared 50:50. • Financing implications are addressed separately.
Vietnam	• Vietnam allows for the PPP Contract to be amended by a change in the master plans, policies or laws that significantly impact the project's technical or financial plans, prices and charges of public products and services supplied by the Private Partner.[76] The allocation of risk of change in law is not stipulated in the PPP Law, which allows the parties to determine how the risk of change in law is best allocated between the parties in the PPP Contract. • The procedure to revise the PPP Contract is for one of the contracting parties to issue a written proposal for revising the PPP Contract, which clearly states the reason. The parties negotiate the proposed contents, including price, contract term and other content of the PPP Contract that need changing. Once agreed upon, the parties will sign an annexe to the PPP Contract. [77]

[76] Socialist Republic of Vietnam , 2021, Article 50 of the Law on Public Private Partnership Investment
[77] Socialist Republic of Vietnam , 2021, Article 50 of the Law on Public Private Partnership Investment

7. Guiding Principles

7.1. Qualifying changes in law are typically categorised as general, specific and discriminatory.

7.2. The PPP Contract should clearly define qualifying changes in law, including the date from when a qualifying change in law is relevant.

7.3. The PPP Contract should address who is responsible for the consequences arising from qualifying changes in law during the term (i.e., the allocation of the risk of changes in law).

7.4. The approach to allocating the risk should consider Cambodia's legal environment, the project's bankability and project characteristics. In developing countries in an early stage of PPP development, it may be value for money for the IA to retain all the risks of all types of changes in law, although this should be considered carefully and there may still be benefits to excluding the broadest types of law changes, such as changes in tax rates.

7.5. The PPP Contract should set out the notification process to determine if a qualifying change in law has occurred and any relief and/or compensation that arises.

7.6. In addition to cost compensation, the Private Partner may be entitled to relief from breach of Contract and EOT for performance.

7.7. There may be circumstances in which a change in law results in cost savings, and the PPP Contract should consider allowing for the Private Partner to share these gains with the IA.

7.8. The Private Partner should be required to mitigate and demonstrate direct causation between the change in law and the consequences of accessing relief and/or compensation.

X. VARIATIONS

1. Overview

1.1. Events during the lifecycle of a PPP may require a variation (also referred to by industry participants as modification) to a PPP Contract. Such a variation might be required:

- During the Construction Phase of the PPP Project, where a change to the works, design requirements or the way the development activities are carried out from that set out in the project plan, and/or
- During the Operational Phase, where a change may be required to either the project assets or the services provided.

1.2. The IA should consider ensuring that the contractual process for each type of variation is correctly understood and followed whenever the need for change arises. If the variation procedure does not result in an outcome satisfactory to both parties, there can be a risk of dispute arising that will require more difficult and costly dispute resolution to solve. Further information on the dispute resolution process is set out in Section XIII (Dispute Resolution).

1.3. Variations can have a material impact on the project's costs, timing of delivery, financing and risks. The consequences can be significant even if the basic request is seemingly minor. For example, a small delay in works can have cascading effects on the mobilisation of other works, and also implications for the timing of loan repayments. Variations can also be difficult to negotiate, as the IA is dealing with a single partner who is confirmed in their role in the project, limiting the scope for competitive pressure to drive the best terms for the IA.

1.4. Accordingly, the Law on PPPs says that they should be avoided except in very exceptional circumstances where it is found that a scope change is necessary. The best protection against future variations is to do as much work as reasonably possible before the PPP Contract is signed to ensure that the initial project scope is settled.

2. Variation Types

2.1. There are typically five main categories of variations with respect to a PPP Contract:

2.1.1. **Variations that Involve No Additional Costs or Time**: A change in scope which results in a reduction in cost or time to complete works or services. This may be initiated by either party.

2.1.2. **Minor Works Variations:** Proposed minor additional capital works initiated by either party. The PPP Contract typically defines 'minor works', and costs may be calculated against a schedule of rates, which forms part of the PPP Contract.

2.1.3. **IA-initiated Variations:** A proposed material change in the scope of works, initiated by the IA, typically in response to changing policy or service need. The most significant issues in relation to variations usually arise where the IA changes its requirements for the Project, which are often the source of cost overruns and delays in completing projects.

2.1.4. **Private Partner-initiated Variations:** A proposed material change in the scope of works initiated by the Private Partner, typically due to unexpected events or circumstances (e.g., unanticipated ground conditions such as contaminated soil).

2.1.5. **Pre-Agreed Variations**: These are possible changes to the scope of the Project that are identifiable at the time of the signing of the PPP Contract, but the IA is not yet ready to commit to undertaking them.

2.2. The PPP Contract should outline the procedure that needs to be followed in cases where changes or variations to the PPP Contract regarding works, services and/or the means of delivery are required.

2.3. Variation procedures help ensure that performance and risk management continue to operate in line with the PPP Contract obligations and changing project circumstances. The mechanism, which varies by the type of variation involved, will describe the process of effecting the variation, the information and inputs that will need to be shared and agreed and the roles of both the parties and potentially third parties such as the IC.

3. Key Drivers and Considerations

3.1. Variations that Involve No Additional Costs or Time

3.1.1. In circumstances where a proposed variation involves no additional costs or time for the IA or the Private Partner, the procedure for agreeing the change is often minimal. However, the IA should still confirm for itself that the variation will not materially impact the costs, timing or increase any risks.

3.1.2. The IA and the Private Partner should then meet to discuss the best way of implementing the proposed change.

3.1.3. If the variation reduces costs, then, pursuant to the SOP for PPP Projects Volume II: Contract Management Guideline, the IA and Private Partner should endeavour to agree on how to distribute such savings between themselves and end-users.

3.2. Minor Works Variations

3.2.1. Minor variations to the scope of work are typically managed via a minor works clause in the PPP Contract. For example, the PPP Contract will typically include a schedule of rates and/or bill of quantities for a range of minor works, such as a unit rate for labour staff and/or key construction materials. The definition of minor works is typically negotiated and agreed upon between the IA and Private Partner to avoid any potential disputes during the project term.

3.2.2. There are several key impacts that the IA should consider in defining and applying the minor works regime in the PPP Contract, including:

- Ensuring that minor works variations do not negatively affect the completion schedule (unless separately covered as an EOT, see Section VII (Delay)) or increase risks without the IA's approval.
- Providing that any cost increases from minor works variations do not exceed the total contingency allowed for the PPP Project. This can be appropriately managed by having a pre-determined cost increase threshold for minor works variation requests.
- Having the IC assess the Private Partner's schedule of rates and/or bill of quantities before annexing them to the PPP Contract to ensure that the Private Partner is providing competitive rates and value for money.

3.2.3. Any disputes between the IA and Private Partner related to minor works variations should be determined in accordance with the dispute resolution procedure as set out in the PPP Contract. Further information on dispute resolutions is set out in Section XIII (Dispute Resolution).

3.3. **Variations Initiated by the Implementing Agency**

3.3.1. PPP Contracts normally set out a clear process for the IA to initiate and agree variations in order to facilitate agreement between the parties and minimise disputes. Based on SOP guidance, these variations should be limited to changes in the service requirements, specified constraints on inputs, and the limits or scope of project warranties.

3.3.2. An IA-initiated variation typically starts with the IA submitting a variation request to the Private Partner. The request should describe the nature of the variation (e.g., a change in the outputs required) in reasonable detail so that the Private Partner can properly analyse the changes involved. The Private Partner is required to respond within a defined period with an estimate of the technical, financial, contractual and risk impacts of the variation, along with implications for the delivery plan and timing, as well as any other information requested by the IA, such as the implications for any approvals.

3.3.3. The IA then evaluates the response in terms of the impacts identified and the assumptions used. It should also evaluate the capability of the Private Partner to deliver the proposed variation. There may be a process of Question and Answer (Q&A) to clarify the response as part of the analysis.

3.3.4. The IA should consider consulting an IC to review the Private Partner's response, assess it from a methodological perspective, advise on whether it is priced in accordance with the PPP Contract, and also advise on whether it represents value for money. Further information relating to the role of the IC is set out in Section VI (Independent Consultant).

3.3.5. The IA is free to accept or reject the Private Partner's response. Rejection means that the variation will not proceed.

3.3.6. Because the variation is wanted by the IA, and not necessarily the Private Partner, the IA generally compensates the Private Partner for the net negative impact of the variation on the project for the Private Partner, so that the Private Partner is not worse off than before. The IA also bears its own costs and impacts. In many contracts, the IA also pays the costs that the Private Partner incurs in analysing the proposal and generating a response.

3.3.7. PPP Contracts can provide for the IA to order the variation to proceed, even if there are still issues in dispute that will be resolved later under the dispute resolution process.

3.4. **Variations Initiated by the Private Partner**

3.4.1. In some circumstances, the Private Partner will wish to propose a variation in order to improve some aspect of the Project, with possible impacts on time, cost, financing and risk. Proposals should not be submitted or accepted purely to relieve the Private Partner of the obligations it already has under the PPP Contract. The PPP Contract normally defines a process for such Private Partner-initiated variations.

3.4.2. As with responses to IA-initiated variations, the proposal should be appropriately detailed and set out the technical, financial, contractual and risk impacts of the variation, along with implications for the delivery plan and timing, as well as any other information requested by the IA, such as the implications for any approvals.

3.4.3. The IA should first determine whether the proposal, as described by the Private Partner is something it wishes to pursue from the perspective of its policy objectives and target outcomes for the Project. Once the IA has determined that the proposal is of interest, it should then conduct a detailed analysis of the proposal across all the relevant issues presented, along with the Private Partner's capacity to deliver the project with the variation. There may be a process of Q&A to clarify the proposal as part of the analysis. Again, an IC may be helpful to review the Proposal to advise on the proposal.

3.4.4. The IA is free to accept or reject variations proposed by the Private Partner, and/or negotiate elements of the proposal, such as the level of compensation paid to the Private Partner. Rejection means that the variation will not proceed.

3.4.5. There may be impacts for the IA and/or the Private Partner. If the proposed variation increases the costs to the Private Partner, the proposal will set out proposed compensation for the Private Partner to be paid by the IA. The IA should generally only pay compensation if the IA considers that the benefit to the project / IA outweighs the overall costs of the proposed compensation.

3.4.6. In addition, the IA will need to consider the impacts of the proposal on the IA (including, e.g., the costs involved for the IA in assessing the variation) and factor these into its determination.

3.4.7. Generally, the Private Partner bears its own costs in developing the proposal for the IA.

3.5. Comparison between IA-Initiated and Private Partner-Initiated Variations

3.5.1. There are a number of similarities and some important differences between IA-initiated and Private Partner-initiated variations. These are summarised in Table 13.

Table 13: Variations – comparison of IA-initiated and Private Partner-initiated variations

Issue	IA-initiated variations	Private Partner-initiated variations
Private Partner's submission	• Response to IA's request	• Proposal
Scope of IA evaluation	• Technical, financial, contractual and risk impacts of the variation • Implications for the delivery plan and timing • Capacity of Private Partner to deliver • Miscellaneous issues (e.g., approvals)	• Alignment of the proposal with the IA's objectives for the project • Technical, financial, contractual and risk impacts of the variation • Implications for the delivery plan and timing • Capacity of Private Partner to deliver • Miscellaneous issues (e.g., approvals)
Impact on parties to be considered	• Impacts on Private Partner • Impacts on IA	• Impacts on Private Partner. • Impacts on IA

Costs of Private Partner's work on developing the analysis of the variation	• Usually borne by IA	• Usually borne by Private Partner

Note that in the instance of an IA initiated variation, the alignment of the proposal with the IA's objectives for the project should be considered before issuing a variation request.

3.6. **Pre-Agreed Variations**

3.6.1. There may be instances where the IA foresees the potential need to make changes to the project but cannot commit to the change before the contract is signed. For example, there may be an expectation that a new high-speed rail line will provide a service every 30 minutes initially, but that this may need to change to every 15 minutes if demand meets certain future targets.

3.6.2. It would be possible to implement such a change through a future IA-initiated variation, but this maximises the potential for the Private Partner to negotiate the costs after the PPP Contract is signed and the IA's negotiating leverage is reduced. Accordingly, the preferred approach in this situation is to lock in as much of the data around the possible variation as possible as part of the PPP Contract negotiations, so that there is less scope for negotiation later, as a pre-agreed variation. Such arrangements have gone by several names, including pre-agreed options and augmentations.

3.6.3. Using this approach, it is possible to set prices on a range of matters, such as the cost of new railcars, unit rates for labour and other costs, and sometimes even necessary quantities. The clauses normally provide for an appropriate adjustment for inflation, noting that the decision to proceed might not be until some years later.

4. Disaster Risk Reduction and Climate Change Considerations

4.1. Legislation and policy frameworks across the globe may change in response to climate change issues over the life of PPP concession terms (discussed in Section IX (Change in Law)). Changes to design or construction codes may require changes to project costs and timing subsequent to contract close, and could trigger a variation under a PPP Contract.

4.2. Leaving aside changes to project specifications relating to changes in law (discussed in Section IX (Change in Law)), the technical specification of the project is generally a matter for the IA to define. As much as is feasible, the IA should attempt to envisage possible developments in design standards to ensure that the technical specification is appropriate for the standards of today and the future.

4.3. Where there is uncertainty about design standards or requirements (e.g., a possible increase in heat resistance specifications for road asphalt), it may be appropriate to price possible changes as optional variations, so that the costs of such changes can be negotiated during the competitive phase of procurement, as already noted in relation to changes in law.

5. International Best Practice

5.1. Some comparable practices to variations in benchmark countries are set out in Table 14.

Table 14: Variations - comparable practices in benchmark countries

Country	Key characteristics
Australia	**National PPP Guidelines:** The National PPP Guidelines do not provide formal guidance on specific contractual terms for variations to the scope of a PPP Contract, though general advice is provided: • The National PPP Guidelines recommend stipulating details on how a proposed departure from, or variation to, the contractual documents is implemented by either party. • The National PPP Guidelines recommend stipulating where obligations or scopes of work in the PPP Contract are mandatory (e.g., no variations will be allowed for certain design elements of the project) and those where certain departures or variations may be considered. **Partnerships Victoria PPP Projects, Department of Treasury and Finance:** • Partnerships Victoria broadly defines variations to include: – During the Development Phase, any change to the works, the design requirements, or the way the development activities are carried out from that set out in the relevant project plan. – During the Operational Phase, a change to the Maintained Assets, or – After Contract Close, a change to the Operational Phase requirements or the services. • Department of Treasury and Finance must be consulted and agree to any variations to the standard Project Deed as well as commercial principles/risk allocation during the procurement process and after Contract Close. This includes any significant contract variations, variations or augmentations and any disputes. • Partnership Victoria's Guidance Notes set out the process for variation notifications and allowable relief for each type of variation, such as IA and/or Private Party initiated variations and pre-agreed variations. The Guidance Notes recommends that to ensure variations are efficiently managed, the Private Partner and IA should meet to discuss the respective variation proposal and agree on how certain issues in respect of the variations are managed.
New Zealand	**New Zealand PPP Project Agreement:** • The New Zealand PPP Project Agreement distinguishes between material changes, and non-material changes. • In order for payment to be made, the specified change process must be complied with. • The party initiating the change must complete and send a 'Change Notice' to the other party. • A Change Notice should be responded to within a pre-specified number of days, depending on whether the change is considered material or not, setting out: – All the steps that the Private Party proposes to take to implement and verify the completion of change. – The schedule for implementing the change.

Country	Key characteristics
	– Details of all known consequences of the change. – Any competitive quotations required by the IA. – Details of the proposed change in costs. • If a dispute arises in relation to a variation initiated by either party, then either party should serve a notice of dispute on the other party. Whilst the dispute is in process, the Private Partner and IA should continue to service its obligations under the agreement.

5.2. Case Study 14 and Case Study 15 explore key aspects of variations.

Case Study 14: Brabo 1 Light Rail Upgrade

The Brabo 1 Light Rail Upgrade provided an extension to the existing light rail system between the city centre and local municipals in Antwerp (Belgium) to reduce the number of cars in the city and promote the use of the public transport network. The project reached financial close in 2009 and has a contract duration of 38 years.[78]

At the time of the Financial Close, the estimated operational expense was not able to be measured reliably due to the project's anticipated usage being unclear. Given that this issue was anticipated prior to reaching a financial close, the parties were able to include a provision that allowed for expected or foreseen variations to be made to the PPP Contract.

The fact that the contract provided an option to allow for increased use made it possible to devise a formula later, which would, through carefully designed monitoring of asset deterioration, estimate the impact on the asset condition and forecast the amount of additional costs needed to provide additional maintenance. As such, there were no significant issues related to the payment mechanism when the project experienced an increased frequency of use.

This case study highlights the importance of including provisions for anticipated change in the PPP Contract where appropriate so that unnecessary negotiations do not hinder the progress or outcome of the project.

Case Study 15: Sydney Metro

The PPP Contract for the operations, trains and systems package for the first phase of Sydney Metro (Northwest) was executed in 2014. At the time, Transport for NSW (TfNSW) was aware that it would eventually want this line to link up seamlessly with another new line, City & Southwest, that was currently in the planning stage and would be built some years later. Meeting this objective required that there be a single Private Partner operating the two lines as a single project.

Accordingly, TfNSW set out an augmentation clause in the Northwest PPP Contract providing detailed terms on which the Private Partner would take on responsibilities for the new line. The clause included unit costs for a range of materials and labour that would be required.

This clause was successfully used as the basis for negotiations with the Private Partner, with the result that a PPP was executed with the Private Partner in March 2020.

[78] Global Infrastructure Hub, 2022, Brabo I Light Rail Case Study

6. Guiding Principles

6.1. IAs should make reasonable efforts to avoid contract variations unless there is a clear benefit to the project.

6.2. IAs should ensure that an appropriate variation procedure is included in the PPP Contract and should clearly set out circumstances where a variation is required, noting the different types of variations that can occur.

6.3. The PPP Contract should:

- Require the Private Partner to follow the variation approval procedure set out in the Project Deed.
- Outline the steps that the Private Party plans on taking to implement the variation.
- Outline the proposed additional costs resultant of the variation.
- Outline the impact on the project completion schedule.
- Set out any other known consequences resultant of the variation.

6.4. The IA should maintain careful control over variations to avoid exceeding the project contingency budget. In cases where the contingency amount will be exceeded, the IA should seek endorsement from the Contract Management Committee (CMC) and then approval from the MEF Minister.[79]

6.5. IAs should consider using an IC to verify the impacts of proposed variations on cost and the program if the IA is not appropriately resourced or is conflicted from performing verifications themselves.

6.6. IAs should consider ensuring that provisions for expected or foreseen variations are included in the PPP Contract to minimise the need for later negotiations and the risk of disputes.

[79] Government of the Kingdom of Cambodia, 2022, SOP for PPP Projects, Volume I: Policies and Procedures (VII Implementation and Management of PPP Contract)

XI. RELIEF AND COMPENSATION

1. Overview

1.1. Relief and compensation are both important mechanisms in PPP Contracts for remedying the impact of adverse events and/or breaches or non-performance. In principle, there is nothing preventing relief and compensation being drafted for the benefit of either the Private Partner or the IA. In practice, relief and compensation are mostly seen as remedies that are provided by the IA to the Private Partner, while the IA's remedies for when the Private Partner is at fault include liquidated damages, calling on bonds or guarantees, withholding service payments and default leading to termination.

1.2. Another important rationale is that, for the most part, the IA usually has a limited number of obligations that affect the timetable for construction and operations (the main area where relief in the form of extensions of time may be granted), and the IA can generally perform its obligations without depending on some actions by the Private Partner. In these circumstances, there is no rationale for an IA to need relief from the Private Partner due to the Private Partner's action or inaction.

1.3. Relief involves the waiver of the Private Partner's contractual obligation upon the occurrence of an event specified in the PPP Contract. The waiver may relate to, e.g., a release from an obligation to pay financial penalties (such as liquidated damages), the mitigation of a required performance standard, and/or the extension of a deadline. Relief is generally granted for events that are outside of the control of the Private Partner and directly affect the project's performance, but which fall short of force majeure.

1.4. Compensation involves the payment of money or other consideration to the Private Partner for an event causing a loss to the Private Partner. The focus is mostly on acts or omissions by government that have a direct financial impact on the Private Partner.

1.5. The SOPs contemplate a specific chapter in the template PPP Contract setting out the relief and compensation obligations of the parties for the operations, construction, and maintenance phases of the PPP. Further references to relief, compensation and force majeure are set out in:

- SOP for PPP Projects Volume 1: Policies and Procedures, 3.6 Management of Defaults.
- SOP for PPP Projects Volume 2: Guidelines, Guidelines on Contract Management.
- SOP for PPP Projects Volume 2: Guidelines, Guidelines on GSM.

1.6. Depending on the circumstances and the drafting of the PPP Contract, there may be some overlapping remedies under the headings of relief and compensation and force majeure (see Section XII (Force Majeure)).

2. Relief

2.1. **Events Giving Rise to Relief**

- Unforeseeable adverse weather conditions, such as lightning, storm, tempest, or flood (usually beyond a normal standard for the climate, as the Private Partner will typically accept some risks in the form of timetable contingency or buffer).
- Labour disputes (that are not specific to or caused by the Private Partner).

- Unforeseeable shortages of critical materials or supplies (e.g., fuel, transport) caused by factors outside of the Private Partner's control.
- Non-performance by the IA of its obligations, such as providing access to land, granting of permits or delivering required utilities.
- The discovery of adverse ground conditions, such as contamination or archaeological finds (that could not have been identified by appropriate diligence by the Private Partner).
- The accidental failure of infrastructure external to the Private Partner that is required for the project, such as burst water pipelines, damage to electricity cables, etc. (not caused by the Private Partner).
- Legal challenges against permits, licenses, or authorisations for the project.
- Changes in law (noting that these are often the subject of a specific regime, see Section IX (Change in Law)).
- Interference by third parties, such as vandalism or sabotage.

2.2. Relief and Force Majeure

2.2.1. The concepts of relief and force majeure share some similarities, in that they both address circumstances beyond the parties' control that result in forgiveness of obligations. However, there are important differences as noted below.

2.2.2. Force majeure is generally recognised as relating to large-scale events that neither party can control, such as Natural disasters, Pandemics, War, Terrorism and Nuclear contamination. Such events render the performance of the entire contract largely impossible, often for both parties. If force majeure is prolonged, the PPP Contract may provide for a right of termination.

2.2.3. Relief events are generally smaller-scale, usually relating more directly to the Project (and often to the action or inaction of the IA) and can give rise to more targeted relief of specific obligations. A prolonged relief event generally does not give rise to a right to terminate the PPP Contract.

2.2.4. In both cases, the parties are expected to take reasonable steps to mitigate the negative impact of the event.

2.3. Form of Relief

2.3.1. The forms of relief can comprise:

- **Extension of time**: The Private Partner may be given additional time to complete specific milestones without being liable for breaching previous milestone dates.
- **Adjustments to performance standards**: Performance standards or targets may be adjusted to reflect the reduction in the performance of the project caused by the relief event, on either a temporary or permanent basis.
- **Adjustment to revenue structure**: Tariffs, availability payments, customer charges and other payments could be adjusted to address increased costs or reduced revenues.
- **Reimbursement of costs**: increased costs caused by the relief event (e.g., the costs of addressing unforeseen site conditions) may be reimbursed by the IA.

- **Relief from termination rights**: The IA may undertake not to exercise its right to terminate for Private Partner default due to failures caused by the relief event.
- **Adjustments to the contract term**: The contract term may be extended to provide the Private Partner with additional time to recover and achieve the expected project outcomes, particularly for revenue-risk PPPs.

2.3.2. The specific relief measures will be determined on a case-by-case basis, depending on the nature of the event and its impact on the project, and may be temporary or permanent depending on the nature of the event and what the parties negotiate as an appropriate remedy. SOP for PPP Projects Volume 3 Procurement Manual Annexures Section 2 provides further guidance on determining any extension of time, monetary compensation, or relief from penalties pursuant to the PPP Contract.

3. Compensation

3.1. Events Giving Rise to Compensation

3.1.1. Examples of the types of events that may give rise to compensation for the Private Partner include:

- Certain breaches of contract by the IA.
- Delays in planning approvals by the IA.
- Failure by the government to provide land or a right of way on a timely basis.
- Changes in national law or regulations (as outlined in Section IX (Change in Law)).
- Injuries caused to workers by the action or inaction of the IA.
- Costs of decontaminating a site affected by a third party's disturbance of contaminated material.

3.2. Sizing of Compensation

3.2.1. The intent of compensation is to restore the affected party to the financial position they would have been in had the event not occurred. The scope of compensation may cover:

- Direct costs: The Private Partner may be compensated for any costs that it has incurred, such as additional labour costs, equipment costs, or material costs that have been incurred due to needing to address the compensation event.
- Loss of revenue: The Private Partner may be compensated for any revenue it has lost (e.g., due to a delay in project completion). For availability-based PPPs, this may involve compensating the Private Partner for lost availability payments (unless the PPP term is extended to offset the losses).
- Additional financing costs: Compensation events can sometimes lead to increased financing costs for the Private Partner, especially if the project timeline is extended.

3.3. Process for Approving Compensation

3.3.1. The process for approving compensation involves:

- The injured party makes a claim, notifying the IC.
- The IC is empowered to make a determination of whether a breach has occurred and what the remedies should be. This decision is not binding and either party is

entitled to access the dispute resolution mechanism under the PPP Contract (see SOP for PPP Projects Volume I, 3.6.4 Management of Defaults).

- The matter will be referred to the CMC for making the decision on formalizing the event of default or breach. The CMC will review the penalties/damages/ compensation resulting from the default or breach and provide recommendation to the Head of the IA and the Minister of MEF for consideration and approval (see SOP for PPP Projects Volume I, 3.6.3 Management of Defaults).

3.4. **Forms of Compensation**

3.4.1. The compensation can be structured in various forms, depending on the PPP Contract and the specific circumstances:

- Lump-sum payments: The IA may pay the Private Partner a one-time payment.
- Periodic payments: the compensation may be paid incrementally over a period of time, which can be useful in matching the period of payment to when costs will be incurred and/or if the total required payment is not yet certain.
- Adjustments to availability payments: The level of Availability Payment may be adjusted.
- Adjustments to tariffs or fees: The Private Partner may be given the right to increase user fees or tariffs (if these were previously controlled by the IA).
- Reimbursements: The IA may pay for costs as and when they are incurred.
- Adjustments to the contract term: The contract term may be extended to provide the Private Partner with additional time to recover and achieve the expected project outcomes, particularly for revenue-risk PPPs.

4. Liability Management

4.1. Relief and compensation are both powerful remedies for a Private Partner and can potentially open the Government to extensive costs and other exposures.

4.2. Accordingly, a number of conditions and requirements are usually placed around claims for relief and/or compensation:

4.2.1. **Notice**

4.2.1.1. The Private Partner is required to promptly notify the IA with full details of the event, its impact on the project, and the steps being taken to mitigate the situation. A failure to provide timely notice may result in the claim relief or compensation being denied under the PPP Contract.

4.2.2. **No Fault**

4.2.2.1. Although relief and compensation generally relate to risks the Private Partner could not reasonably be expected to bear or manage, any situation that has been caused or contributed to by the Private Partner will generally not qualify for a remedy, or the scope of the remedy may be reduced.

4.2.2.2. Typical wordings in other jurisdictions refer to fraudulent, negligent, reckless, unlawful, or malicious actions by the Private Partner, although any usual standards and/or wordings applied in Cambodia should be considered in drafting.

4.2.2.3. These considerations can be quite detailed and depend on the facts of the particular event. For example, if delays in the granting of land have resulted in costs to the Private Partner, it would not be appropriate to grant relief or compensation if the Private Partner has not actively taken reasonable measures to inform the IA of the delays and the potential impacts on the Project.

4.2.3. Insurance

4.2.3.1. Most PPP Contracts limit the remedies for any event where the Private Partner has insurance against the loss, or is required to have such insurance under the PPP Contract.

4.2.4. Mitigation

4.2.4.1. The Private Partner is expected to take all reasonable steps to mitigate the impact of the event, including adjusting its operations or adopting alternative approaches to minimise delays or disruptions, and remedies may be adjusted for what the Private Partner has done or reasonably should have done (Such measures should not require the Private Partner to increase its costs).

4.2.5. Dispute Resolution

4.2.5.1. If the parties cannot agree on the appropriate course of action, a disagreement about the proper relief for a given event can trigger access to the dispute resolution mechanisms in the PPP Contract.

4.2.6. Direct vs. Consequential Losses

4.2.6.1. PPP Contracts generally specify that losses must be directly caused by the event to be eligible for compensation and that losses that are less directly connected to the event (so-called consequential losses) are often excluded. (Even with careful drafting, the types of costs that are eligible for compensation can still be a matter of dispute).

4.2.7. Manner of Calculation

4.2.7.1. Some PPP Contracts pre-agree some elements of the formula for compensation, such as the cost per unit for certain key inputs, or maximum margin the Private Partner is entitled to make on its third-party input costs, in order to reduce the scope for future disagreement.

4.2.8. Liquidated Damages

4.2.8.1. If the parties are trying to address a known risk with damages that are readily quantifiable, it may be appropriate to assess a liquidated damages regime. This would fix the value of the compensation, generally as an amount per day, based on what is referred to in most markets as a “genuine pre-estimate of the loss”. This provides much greater certainty to both parties as to the consequences if the event occurs.

4.2.8.2. It is often useful to calculate a daily delay rate covering the Private Partner’s mobilised labour and plant, corporate overheads and agreed margins. This can be used for delays in most circumstances, noting that delays are normally reasonably common.

4.2.8.3. This approach generally works best where the relevant event is likely to occur at some stage and the value of the damages is easy to calculate and unlikely to vary according to the specific circumstances. Conversely, this approach is much less suitable for complex or rare scenarios or where the fair compensation is likely to vary depending on the circumstances.

5. Relief Event and Compensation Events

5.1. Relief is generally granted for events that are outside of the control of the Private Partner and directly affect the project's performance, but which fall short of force majeure.

5.2. Compensation is mostly relevant to acts or omissions by government that have a direct financial impact on the Private Partner.

5.3. Accordingly, most PPP Contracts have definitions of the events that will constitute relief events and compensation events based on these distinct rationales and the primary remedy that will be made available to the Private Partner.

5.4. The distinction is not perfect. There can be, for example, events that the Private Partner cannot control and which are not government's fault, but for which relief on its own may not be a sufficient remedy. Similarly, there may be events that are government's fault, but for which a mix of compensation and relief may represent much better value for money than compensation on its own. The exact manner in which these hybrid scenarios are drafted in the PPP Contract is typically a matter for the IA's legal advisors.

5.5. For example, a failure on the part of the IA to provide access to a site by the date for commencement of the works could potentially give rise to an extension of time (i.e., relief from the obligation to achieve practical completion by a set date) as well as compensation for any additional mobilisation costs incurred due to the need to delay the start of works.

5.6. One general difference can be found in the level of compensation that a relief event attracts—it is generally lower than the compensation for a compensation event, as it often reflects a measure of risk sharing between the parties. For example, the IA might pay compensation to the Private Partner under any of the following options:

- At a rate that is intended to enable the Private Partner to service its senior debt for the period (i.e., at a rate lower than the Private Partner's actual losses for the period).
- At a rate that is intended to ensure that the loss of revenue for the period is shared between the Private Partner and the IA (e.g., the rate of compensation could be set at 50% of the revenue that the Private Partner would have otherwise received).
- For any increased costs that exceed a defined threshold in monetary terms, meaning that the Private Partner takes the risk on smaller losses but is protected from larger ones.

5.7. To summarise, while it is possible to clearly state some general principles related to relief and compensation, the exact form of remedy for any given event in the PPP Contract may vary according to the specific nature of the project, the nature of the event, the specific terms of the PPP Contract negotiated by the parties and the parties' assessment of the most practical solution to the particular event.

6. Role of External Experts/Valuation Professionals

6.1. As discussed in Section VI (Independent Consultant), the SOP for PPP Projects stipulates that the PMU, in consultations with the GDPPP may engage the services of external experts/valuation professionals to estimate the financial value of the impact of a compensation event in accordance with relevant provisions in the PPP Contract.

6.2. The role of the IC is to confirm the notification of the relief event. In accordance with SOP for PPP Projects Volume III, Procurement Manual Annexures Section II: Annexures to the Selection of Consultants Part B Annexure 8, the IC may determine any monetary compensation or relief from penalties to which the IA and/or Private Partner is entitled to a suspension or variation of any construction works pursuant to the PPP Agreement. This is especially the case when there are various interpretations of the event.

7. International Best Practice

7.1. Some comparable practices to compensation calculations in benchmark countries are set out in Table 15.

Table 15: Compensation calculations – Benchmark countries' comparable practices

Country	Key characteristics
Partnerships Victoria (Australia)[80]	The amount payable is calculated using formulas which vary depending on the stage of the infrastructure lifecycle (e.g., development vs operational phases). Calculations consider some of the following items, such as Prolongation Costs (additional cost of Private Partner, contractors and consultants resulting from delay), Private Partner Margin (fixed percentage Private Partner may charge as margin or as a result of an event) and Development Phase Finance Interest (incremental interest payable by Private Partner as a consequence of a delay).
Standardisation of PFI Contracts (UK)[81]	Financial models calculate monetary figures and when compensation should be paid. The compensation amount is adjusted if the compensation event involves an additional cost or a time delay with cost or loss of revenue implications. Typically, this requires the IA to agree that the senior debt loan life cover ratio and equity return are to remain unchanged.
Model Design, Build, Finance, and Manage (DBFM) Agreement (Netherlands)[82]	Compensation considers the following items: direct costs (including materials and labour, not including entailed subcontracts costs), engineering costs, one-off time-bound general construction site costs, standardised increment for market conforming general costs and profit, other organisational costs, risks, delay costs, decrease in income and processing costs for a contractor change.

[80] Victorian Treasury and Finance, 2022, Availability PPP PV Standard Project Deed - Guidance Notes
[81] HM Treasury, 2012, Standardisation of PFI Contracts Version 4
[82] Rijkswaterstaat Ministry of Infrastructure and Water Management, 2012, Rijkswaterstaat DBFM Agreement

7.2. Case Study 16 outlines relief and compensation events on Sydney Light Rail.

Case study 16: Sydney Light Rail[83]

- In December 2014, TfNSW awarded a PPP Contract to design, construct, operate and maintain a 24km light rail line in Sydney to the ALTRAC consortium.
- From inception, the project experienced ongoing disruptions and delays due to the discovery of 1,400 unexpected underground utility assets such as telecommunications cables, electrical wires, and gas and water pipes. Each discovery required investigations, notification, and assessment by TfNSW and approval and guidance from utility providers before it could be protected, relocated, or removed.
- Acciona (one of the ALTRAC consortium members) claimed a critical part and key delivery risk of the project was how the company would deal with underground electricity infrastructure and that TfNSW induced it to enter the PPP Contract on a false premise.
- The parties settled in June 2019 after a year in dispute, with Acciona receiving AUD 576 million in compensation.
- The value was calculated based on extra costs incurred over the extended PPP term to 2036 (including costs relating to underground utility work). AUD129 million of the settlement was held until construction deadlines were met in 2019 and 2020.

8. Guiding Principles

8.1. Especially if there is limited market experience of PPP Contracts in the target market for Private Partners, consult with industry around the role of relief and compensation will play in the overall risk calculation.

8.2. In a dedicated chapter of the contract, outline the relevant party's obligations, rights and compensation entitlements associated with relief and compensation events (particularly related

8.3. to the construction and O&M phases of the PPP lifecycle).

8.4. The measures adopted in the PPP Contract should be assessed specifically for the project concerned, drawing on precedent from other contracts as appropriate but making any necessary adjustments to reflect particular risks identified by the parties.

8.5. Compensation can be structured in various forms, depending on the PPP Contract and the specific circumstances, such as: lump-sum payments, periodic payments, adjustments to availability payments, adjustments to tariffs or feeds, reimbursements and adjustments to the contract term.

8.6. Consider benchmark countries' practices in defining the manner of calculating compensation amounts.

8.7. In considering relief and compensation, consider the role that insurance may play in protecting the Private Partner from adverse events.

8.8. Carefully consider the limitations on the IA's liability that may be appropriate, including requiring prompt notice, limiting remedies if the Private Partner has

[83] Supreme Court New South Wales, 2019, Acciona Infrastructure Australia v Transport NSW [2019] NSWSC 1156

contributed to the event or has not taken reasonable steps to mitigate, and excluding remedies for so-called consequential losses.

8.9. Provide for access to the PPP Contract's dispute resolution mechanisms for matter they are unable to resolve through negotiation.

8.10. If liquidated damages are proposed for certain events, endeavour to ensure that in each case they represent a genuine pre-estimate of the loss suffered.

8.11. If a relief or compensation event arises:

- Gather as much factual detail about the event and the proposed claim by the Private Partner as reasonably possible.
- Endeavour to explore options for resolving the issue with the Private Partner on a cooperative basis—there may be a negotiated solution that both parties may prefer over strict compliance with the PPP Contract. Any such negotiated solution should be evaluated to ensure that it offers VfM to the IA.
- If the event involves compensation, engage the services of an external expert/valuation professional to estimate the financial value of the event under the PPP Contract.

XII. FORCE MAJEURE

1. Overview

1.1. Article 30 of the Law on PPPs states that the PPP Contract shall specify the conditions for changes to the PPP Contract, including force majeure.

1.2. Force majeure in relation to PPPs means events outside of both parties' reasonable control, which may prevent the parties from fulfilling some or all of their obligations under the PPP Contract. Examples include natural disasters such as fire, flood, war, and invasions.

1.3. Such events are generally rare. However, the recent global Novel Coronavirus (COVID-19) pandemic and public health orders highlight the importance of having clear force majeure provisions.

1.4. The Cambodian Civil Code recognises the concept of force majeure but does not expressly define it,[84] and the definition of force majeure is usually dealt with in the provisions of a contract. The Cambodian Law on Construction defines force majeure as 'an event that happens against one's will, is unexpected and irresistible'.[85]

1.5. PPP Contracts usually set out specific arrangements for force majeure events. This is regarded as essential to make the PPP bankable for lenders and equity investors.

2. Force Majeure Provisions in PPP Contracts

2.1. Force majeure provisions aim to allocate the financial and timing consequences of a force majeure event between the IA and the Private Partner. The key issues that IAs should consider when drafting and negotiating force majeure provisions are:

2.1.1. **The Definition of the Events or Circumstances that Qualify as 'Force Majeure:'** It is preferable that this is defined as an exhaustive list of specific events to avoid uncertainty. This is further discussed in Section Events constituting force majeure.

2.1.2. **The Allocation of the Risk of Force Majeure:** Force majeure is typically treated as a shared risk as it is generally understood that neither party is better placed than the other to manage the risk or its consequences.

2.1.3. **The Notice Provisions**: It is usual to contain an express obligation to notify the other party of the relevant event, the extent to which relevant obligations are affected and, potentially, the anticipated length of delay that will arise from it. It is usual to require the continuing provision of information for the duration of the force majeure event.

2.1.4. **The Relief Available to the Parties:** It is common to provide time relief on the performance of PPP Contract obligations.

2.1.5. **The Interaction with the Termination Clause:** A payment may be available to the Private Partner if the PPP Contract is terminated for force majeure in limited circumstances. The amount and conditions of the termination payment will be defined in the PPP Contract (see Section XVI (Termination of PPP Contract)).

2.1.6. **The Role of Mitigation:** To access relief, parties are expressly obliged to use reasonable endeavours to reduce the impact of the force majeure event.

---

[84] RHTLaw Asia, 2021, COVID-19 Asia Guide to Force Majeure
[85] Government of the Kingdom of Cambodia, 2019, Law on Construction No NS/RKM/1119/019

2.1.7. **The Conditions that Give Rise to a Party having the Right to Terminate the PPP Contract.**

2.1.8. Some comparable practices of definition of force majeure events in benchmark countries are set out in Table 16:.

Table 16: Definition of force majeure - comparable practices in benchmark countries

Country	Key characteristics
Australia - Partnerships Victoria[86]	Force majeure is not defined under Australian common law or statute. Force majeure is addressed in the PPP Contract. The purpose of the force majeure provisions is to give the parties relief from default and liability in respect of a limited category of catastrophic events that: • Are generally outside of the control of either party. • Prevent the parties from performing all or a material part of their obligations under the PPP Contract. The definition of force majeure events requires consideration on a Project-specific basis. An example definition clause is set out below from a standard PPP Contract. This approach sets out an exhaustive list that includes natural disasters, and uninsurable risks such as war and terrorism. Future PPP Contracts may include a specific regime for pandemics, such as the North East Link Road Project PPP Contract.[87] Force majeure event means the occurrence of: • Earthquake, natural disaster, bushfire, landslide, seismic activity, tsunami or mudslide. • Winds. • A flood which might be expected to occur no more frequently than once every 100 years. • Fire, explosion or flood caused by an earthquake, natural disaster, bushfire, landslide, seismic activity, tsunami or mudslide. • An uninsurable risk, or • An interruption in services provided by a utility (e.g., electricity distributor). Where the event: • Occurs after the date of the PPP Contract. • Occurs at or in the direct vicinity of the Project area. • Was not caused by the Private Partner or associate, government or associate, or any interface party. An uninsurable risk means any:

[86] Department of Treasury and Finance, 2018, Availability PPP PV Standard Project Deed – Guidance Notes
[87] Buying for Victoria, 2021, North East Link Project – Primary Package Project Deed

Country	Key characteristics
	• War, civil war, rebellion, revolution, military usurped power or mutiny, military insurrection, military commotion or other civil commotion. • Chemical, nuclear or biological contamination (but excluding a pandemic or any contamination which the Private Partner must remediate). • Ionising radiation or contamination by radioactivity, or • Terrorist acts occurring in the Project area (except to the extent coverage is provided for a declared terrorist incident by the operation of terrorism legislation).
UK - Standardisation of PF2 Contracts[88]	The PF2 Contract proposes a limited, defined list for its force majeure events. Force majeure events are a specific class of events which disrupt the fulfilment of obligations under a PPP Contract and which arise through no fault of either party. A force majeure event means the occurrence of: • War, civil war, armed conflict or terrorism. • Nuclear, chemical or biological contamination, unless the source or the cause of the contamination is the result of the actions of or breach by the Private Partner or its subcontractors, or • Pressure waves caused by devices travelling at supersonic speeds. A force majeure event directly causes either party to be unable to comply with all, or a material part, of its obligations under the PPP Contract. In addition to force majeure events, the PF2 Contract proposes a defined list for 'relief events' including fire and flooding, sometimes construed as force majeure events in other jurisdictions. Similarly to force majeure events, relief events are not assumed to be the fault of either party, though are considered to be manageable by the Private Partner and therefore do not entail a right to terminate the Contract. Under the guidance, the primary factor in allocating the risks of force majeure and relief events is who is best placed to manage the risk and its consequences. Regarding insurance, the guidance provides that whether the Private Partner can insure against such risks is a matter for the Private Partner. The guidance further provides that uninsurable events should not automatically qualify for treatment as force majeure.
New Zealand[89]	The standard PPP Contract sets out a defined list of force majeure events where some are considered uninsurable events. This will impact what relief is available to the Private Partner.

[88] HM Treasury, 2012, Standardisation of PF2 Contracts
[89] New Zealand Infrastructure Commission Te Waihanga, 2013, Standard Form Public Private Partnership (PPP) Project Agreement

Country	Key characteristics
	Force majeure event means any: • Cyclone, tornado, earthquake, natural disaster, landslide, tsunami, flood, volcanic eruption, or mudslide. • Civil riot, civil rebellion, revolution, terrorism, military usurped power, an act of sabotage or act of a public enemy and war (declared or undeclared) or other like hostilities. • Epidemics or pandemics to the extent that the Private Partner or its subcontractors cannot, in compliance with law, access the site or deliver the services. • Any ‘terrorist act’ as defined in terrorism legislation. • Ionising radiation, contamination by radioactivity, nuclear, chemical or biological contamination not caused or contributed to by the Private Partner or any Private Partner-related person, and/or • An explosion or fire caused by an event referred to in the first two points, not caused or contributed to by the Private Partner or any Private Partner personnel, where the Private Partner can demonstrate that all reasonable preventative measures were taken (having regard to the nature of the site and the facility) to minimise the cause and effect of the explosion or fire on the performance of its obligations under the PPP Contract. Uninsurable event means a force majeure event that: • Is, at the time of its occurrence, uninsurable, or • Continues to subsist following the expiry of the period of coverage under the Private Partner’s contract works insurance (advanced loss of profits) and/or consequential loss (business interruption) insurance.

2.2. **Events Constituting Force Majeure**

2.2.1. Given that the common meaning of the term force majeure is not certain and may be open to interpretation, it is in the interests of all parties to ensure that the events that may comprise force majeure are clearly defined in the PPP Contract.

2.2.2. The definition of force majeure in the PPP Contract should be clear as to what extent the underlying civil law applies. For example, in some jurisdictions, there are civil laws affecting the apportionment of liability between the parties. The IA should negotiate and draft provisions on force majeure to clarify the relationship with any potentially applicable civil law, e.g., the Cambodian Law on Construction.

2.2.3. Defining an exhaustive list of specific events is preferable and reduces uncertainty in applying the provisions.

2.2.4. Typical force majeure events are:

- Natural disasters, including wildfires and floods.
- Pandemic.
- War.

- Terrorism.
- Nuclear contamination.

2.2.5. Parties may negotiate and agree on any exclusions and qualifications in terms of the specific wording. The IA should consider the definition in the context of Cambodia and the Project characteristics, such as the geographical location, which may affect whether a flood, for example, is an anticipated force majeure event.

2.2.6. In some jurisdictions, force majeure can be defined in more general terms and then left to interpretation as matters arise. This can lead to more protracted and difficult disputes and is not recommended.

2.2.7. **Role of Insurance in Defining Force Majeure**

2.2.7.1. The role of insurance policies and the insurance market is an important consideration in defining force majeure. Some risks in the nature of force majeure may be insurable, which can reduce the need for special protections, while other events may be uninsurable. Even for insurable risks, the terms of the insurance may have specific definitions that may require careful attention to see if there are still uninsured risks, and there are usually requirements on the insured party to take appropriate actions to mitigate the consequences if an insured event occurs.

2.2.7.2. PPP Contracts typically require the Private Partner to maintain appropriate insurance, if available, and consult on appropriate coverage requirements with the IA. Each project will have their own requirements for insurance in terms of the risks covered, the level of coverage required, and the specific terms on which insurance is provided (which evolve over time as events such as COVID-19 occur).

2.2.7.3. In general, it is usual to consider the need for insurance to address the following risks:

- Transportation of material and equipment insurance during both Construction and Operation Phases.
- Insurance of project assets during the Construction Phase and Operation Phases.
- Construction 'all-risk' insurance during the Construction Period.
- Professional Indemnity during all Phases.
- Operational Damage insurance during the Operations Phase.
- Third-Party Liability during all Phases.
- Workers' Compensation and Employer's Liability insurance during all Phases.
- Directors' and officers' liability insurance during all Phases.

2.2.7.4. In other projects, specialist insurance coverage may be required for, e.g., mechanical and electrical failure, marine cargo, automobile liability, political risk and consequential loss. The ideal breadth and depth of coverage may require detailed analysis by the IA and TA, in partnership with an insurance advisor, to determine what level of coverage is appropriate given the IA and Private Partner's capacity to avoid or mitigate a given risk.

2.2.7.5. The term of each policy should be aligned with the window of exposure. For example, transport of specific equipment insurance (e.g., for a tunnel boring machine, may not be relevant for the entire Construction Phase). Some jurisdictions use the insurance market's approach to insurable and uninsurable risks as the basis for force majeure, so that force majeure excludes risks for which insurance is available. Other markets (e.g., the UK) have taken a different approach, arguing that the uninsurability of a risk does not automatically justify its definition as a force majeure event, if the Private Partner is best able to manage the risk.

2.2.7.6. Case Study 17 illustrates the benefit of well-defined force majeure provisions.

Case Study 17: COVID-19 global pandemic

- In March 2020, the World Health Organisation (WHO) declared the novel coronavirus (COVID-19) outbreak a global pandemic.[90]
- Depending upon the definition of force majeure in their contracts, Private Partners may be able to make claims for the impact on construction and/or operations. For example, in May 2020, Novia Scotia's Ministry for Transportation and Infrastructure Renewal finalised an agreement with Dexter Nova Alliance to design, build, finance, operate and maintain the 38km twinned section of Highway 104 over a 20-year period.[91] This CAD 717.9 million PPP is unique because its project agreement includes force majeure provisions that specify what would happen in the event of a pandemic. If a pandemic like COVID-19 does cause construction delays, the project company (i.e., Dexter Nova Alliance) will be compensated for all its additional debt service costs.
- In the COVID-19 context, terms such as 'disease', 'epidemic' and 'pandemic', which are often listed as force majeure events, are a natural starting point when it comes to seeking relief. Other less obvious but equally common terms, such as 'natural disaster' and 'Act of God', may also cover COVID-19 impacts.
- Another consideration is that most of the impacts on PPPs arose from the response of governments to the pandemic (e.g., public health orders), and not strictly the pandemic itself.
- In future, parties are likely to carefully review how COVID-19 is treated within force majeure. Currently, it appears that governments are having some success in arguing that COVID-19 is a risk affecting all businesses and that including it in force majeure would give PPPs special privileges that other businesses do not have. For example, in Australia, the PPP Contract awarded in 2021 for the North East Link Road Project expressly excludes 'any pandemic' in its force majeure regime, but provided a separate regime to cover pandemics.[92]

2.2.7.7. Case Study 18 demonstrates how the characteristics of the PPP Project (in this case, geographical location) may impact what events are considered force majeure.

[90] World Health Organisation, 2020, WHO Director-General's opening remarks at the media briefing on COVID-19 11 March 2020
[91] Novia Scotia Transport, 2020, Province, Dexter Nova Alliance Break Ground on Highway 104 Twinning Project
[92] Buying for Victoria, 2021, North East Link Project – Primary Package Project Deed

Case Study 18: Earthquakes in Chile[93]

- Earthquakes are frequent events in Chile as it is located near a tectonic plate.
- Chile has expressly excluded 'earthquakes' from force majeure, citing the frequency with which they occur. This effectively makes them a cost of doing business in Chile.
- The Chilean PPP Law states that catastrophic risk must be covered by disaster insurance, which includes earthquake events. Accordingly, in recent years, Chile has developed its national road network through a series of PPPs, requiring mandatory disaster insurance from Private Partners.
- As a result, the 8.8 magnitude earthquake in Chile in 2010, which caused total estimated infrastructure losses of USD 21 billion, had only a limited fiscal impact on roads built under PPPs.

2.2.8. **Defining Force Majeure in the Cambodian Context**

2.2.8.1. Two specific considerations are relevant to developing policy in relation to force majeure in Cambodia.

– First, the market for insurance against catastrophic risks is at a nascent stage, and therefore many risks may not be insurable. The Government will consider this in preparing and implementing force majeure provisions in PPP Contracts.

– Secondly, Cambodia is more vulnerable to some forms of natural disasters that are not prevalent in other countries, particularly flooding. MEF is developing its policy position on whether normal seasonal flooding should be considered an event of force majeure or should be considered as a relatively normal business risk in Cambodia to be managed by the private sector. The eventual policy position will consider the implications of either approach, taking particular account of the private sector's appetite to absorb this risk.

2.3. **Consequences of Force Majeure**

2.3.1. **Remedies**

2.3.1.1. Depending on the nature of the force majeure event, the parties may be entitled to:

– Make an insurance claim where the force majeure event is covered under an insurance policy

– An EOT (see Section VII (Delay)).

– Compensation (see Section XI (Relief and Compensation)).

– Relief from performance (i.e., the temporary or permanent cessation of some obligations) (see Section XI (Relief and Compensation)).

– Changes to the PPP Contract by way of a variation (see Section X (Variations)).

– Temporary suspension of construction works and/or operations.

– Termination of the PPP Contract for prolonged force majeure as a last resort (see Section XVI (Termination of PPP Contract)).

[93] The World Bank, 2017, Public Private Partnerships Reference Guide Version 3

2.3.1.2. The Owner's Engineer and the IC may be required to provide support to the IA and the Private Partner, respectively, to assess any claims for remedies in the event of a force majeure event.

2.3.2. **Mitigation**

2.3.2.1. To be entitled to relief, the party affected by the force majeure event is required to use reasonable endeavours to mitigate the effects of the event.

2.3.3. **Termination**

2.3.3.1. Termination of a PPP Contract for force majeure can be considered a last resort. Termination is normally only available if the force majeure is prolonged (usually greater than six or 12 months) and severely impacts a party's ability to fulfil its obligations. The Private Partner is usually entitled to at least some compensation. Termination and compensation for force majeure are discussed further in Section XI (Relief and Compensation).

2.3.3.2. Even if the conditions are met, and the Private Partner wishes to terminate, contracts often grant the IA the right to require the Private Partner to continue, provided that they are adequately compensated for the risks and costs of doing so while the force majeure exists.

2.3.3.3. In the event of termination for force majeure, the handback of project facilities will be governed by the PPP Contract, as required by the SOP for PPP Projects Volume I: Policies and Procedures.

3. Disaster Risk Reduction and Climate Change Considerations

3.1. Force majeure events will typically capture most events linked to climate change. "Climate change" is a broad concept and is not a specific risk, but rather, a factor that should be considered in influencing both the likelihood and magnitude of a given project risk. For example, a flood which is so severe as to prevent the completion of the contract will likely qualify as force majeure, whether or not it is perceived to be caused by climate change.

3.2. While not specified in the SOPs, a Climate Risk Assessment (CRA) could be considered as part of the Pre Feasibility or Feasibility Study, developed during Phase 1 of a PPP.

3.3. The results of the assessment may inform the negotiating position of the IA when settling the force majeure clause, on the basis that the more accurately a risk is understood, the more accurately it may be priced. In particular, this assessment may assist the IA to understand if:

- Any specific risks can be excluded from force majeure definition.
- Events can be qualified (e.g., it may be that force majeure applies only in the event of a 1 in 100 year flood, on the basis that the Private Partner can be expected to mitigate any lesser scale flood).
- It is appropriate for the Private Partner to develop and conform to specific climate risk management plans (in addition to any other standard risk management plans), in response to identified climate-driven risks, as a pre-cursor to acceptance of a force majeure claim.

4. International Best Practice

4.1. Some comparable practices on relief and termination that the Private Partner may be entitled to in benchmark countries are set out in Table 17.

Table 17: Relief and termination for force majeure - comparable practices in benchmark countries

Country	Key characteristics
Australia - Partnerships Victoria[94]	The entitlement to relief and compensation recognises that neither party is likely to be in a better position than the other to manage the occurrence or the consequences of the force majeure. The Private Partner may be entitled to time or cost relief where the force majeure event prevents the Private Partner from carrying out all or a material part of the PPP Project activities. The Private Partner will not be entitled to claim compensation if the force majeure event is covered by insurance as part of an insured risk unless the Private Partner can demonstrate that the proceeds of insurance do not cover the compensation. The right to terminate may arise where the event is prolonged and in cases where there is major loss and damage. Subject to compliance with notice provisions and the obligation to mitigate losses, the Private Partner may be entitled to different remedies depending on the situation. • Where the force majeure event has caused loss or damage to the Project assets and is uninsurable: – An EOT during the design and construction phase, and relief from performance during operations. (A repair or rebuild of the Project assets would constitute a variation, see Section X (Variation)). – An amount up to the amount payable under the insurance had the relevant force majeure event been insurable. • Where the force majeure event has caused loss or damage to the Project assets and is insurable: – An EOT during the construction phase and relief from performance during operations. – No compensation for the requirement to repair and reinstate the Project assets, as the insurance should fully cover this risk. • Where there is no loss or damage to Project assets, and the force majeure event occurs during the design and construction phase: – An EOT. – An amount equal to the finance interest due and payable by the Private Partner during construction after the original date for commercial acceptance for the period of delay. • Where there is no loss or damage to Project assets, and the force majeure event occurs during the operational phase:

[94] Department of Treasury and Finance, 2018, Availability PPP PV Standard Project Deed – Guidance Notes

Country	Key characteristics
	– Relief from performance. – The amount necessary for Private Partner to service its debt. – The amount of the service payment related to those services which the Private Partner is continuing to deliver. – The maintenance component of any availability payment for the period when activities are suspended (the suspension period), provided that the IA will only make these payments during the suspension period in respect of planned maintenance activities that are performed. Any other payment for maintenance will be withheld and only paid when the suspension period ends. **Termination:** Either party has a right to terminate if a force majeure event prevents the Private Partner or the government from carrying out all or a material part of their respective obligations for a period exceeding 180 consecutive days (approximately six months). The Government must terminate the PPP Contract if a force majeure event has caused major loss or damage, and the government directs the Private Partner not to repair or rebuild the Project assets.
UK - Standardisation of PF2 Contracts[95]	The purpose of force majeure provisions is to give the affected party relief from liability and, if the event continues for a certain period, to provide the parties with an opportunity to terminate the PPP Contract. As neither party is likely to be in a better position than the other to manage either the occurrence or the effects of force majeure, and the events may continue for a long period of time, the financial consequences are shared. Continuing force majeure events that cannot be resolved within a reasonable time frame (typically, the PPP Contract sets out six months) may lead to termination. The compensation will be on a no-fault basis, and while senior debt will be repaid, the equity will only be repaid with zero returns.
New Zealand[96]	A force majeure event can result in relief for the Private Partner, where it has complied with the notice provisions and has provided appropriate evidence that it has used its best endeavours to prevent or minimise the impacts. The Private Partner may be entitled to: • An EOT. • A suspension of its obligations that are affected by the event. • A continuation of payments for the services that continue to be provided for the availability PPPs during their operating period.

[95] HM Treasury, 2012, Standardisation of PF2 Contracts
[96] New Zealand Infrastructure Commission Te Waihanga, 2013, Standard Form Public Private Partnership (PPP) Project Agreement

Country	Key characteristics
	• Cost compensation for changes related to the force majeure event. • Relief from claims of breach of PPP Contract for suspended obligations. **Termination:** The right to terminate the PPP Contract for force majeure only arises for uninsurable force majeure events. In the case of an uninsurable event, after a certain period ranging from 20 business days to 40 days, if the parties cannot agree, this gives rise to the right to terminate the PPP Contract. If the government wants to continue, it will need to pay the Private Partner a sum depending on whether it is before or after the service commencement date.

5. Guiding Principles

5.1. The definition of force majeure is a key element and should be presented as a clear, exhaustive list of events. When negotiating events, the IA should consider the events in the context of the insurance market, the specific Project characteristics such as geographical location, and any risks that may be associated with the particular industry or sector. The IA should seek legal and insurance advice so that the force majeure definition in the PPP Contract does not conflict with any applicable law, such as the Law on Construction.

5.2. The IA should include notice provisions in the force majeure regime in the PPP Contract. The notice should be required to specify, in reasonable detail, a description of the relevant force majeure event, the extent to which relevant obligations are affected and, potentially, the anticipated length of the delay that may be caused. The Private Partner should be required to continue to provide updated information while the event continues.

5.3. Relief will depend on the nature of the force majeure event, the relevant obligations that are affected and whether the event is insurable. The Private Partner may be entitled to an EOT, the suspension of some or all obligations, relief from claims of breach of the PPP Contract, compensation, and the right to terminate as a last resort. The IA may seek the input of its Owner's Engineer and/or the IC to form an opinion on what relief may be appropriate under the PPP Contract.

5.4. IAs should consider requirements for appropriate insurance coverage for the PPP Project to manage disaster risk exposure where possible.

5.5. An event of force majeure is a problem for both parties and, by definition, is not either party's fault. If an event occurs, the IA and Private Partner should work cooperatively to mitigate the impacts as much as possible.

5.6. IAs should consult closely with MEF at the earliest opportunity regarding any force majeure event that could lead to compensation and/or termination and should seek external legal and financial advice. Termination rights should only be considered when all other mitigations are exhausted, and the force majeure event is prolonged (as defined in the PPP Contract).

XIII. DISPUTE RESOLUTION

1. Overview

1.1. As with many complex, large-scale contracting arrangements, disputes under PPP Contracts can arise due to:

- The complex contractual relationship between the different stakeholders.
- The long-term nature of the contract, which means changes to laws, economic circumstances and political conditions are likely to arise and have unforeseen impacts on the Project.
- Other unforeseen circumstances may be beyond the parties' control (e.g., unanticipated events during delivery, such as adverse site conditions, national industrial action or extreme weather).

1.2. A dispute related to a PPP Contract typically involves a difference of opinion or position between the Government and the Private Partner. It is treated as separate from service delivery issues that are usually measurable and do not necessarily involve a difference of opinion between the parties. E.g., a failure to achieve minimum performance requirements by the Private Partner may result in payment deductions agreed upon as per the PPP Contract, but it would not typically be described as a dispute unless there is disagreement around whether the performance requirements have been achieved, or what the consequences should be.

1.3. In general, methods for resolving disputes include:

- Negotiation: the senior representatives of the IA and the Private Partner with authority to resolve the dispute meet and agree on a solution.
- Mediation: administration of the negotiation by a neutral third party (technical expert) who acts as a facilitator between the parties.
- Independent expert determination: appointment of an independent expert to provide a determination on the dispute.
- Arbitration: appointment of an arbitrator to deliver a determination in accordance with the relevant country's arbitration legislation.
- Litigation: the process of settling a dispute in a court of law. This is typically costly and time-consuming, and involves trial preparations, adjudications, appeals processes and the enforcement of decisions.

1.4. The PPP Law provides a step-by-step process for dispute resolution:

- The IA shall handle and resolve the claims of the Private Partner.
- The Private Partner may pursue claims with the MEF if it is not satisfied with the IA's decision.
- The Private Partner may pursue court proceedings or resolution through international arbitration if it is not satisfied with the MEF's decision.
- Any dispute arising between the IA and the Private Partner must be resolved in accordance with the dispute resolution mechanism stipulated in the PPP Contract.

- With the exception of land disputes, if the PPP Contract fails to prescribe a dispute resolution mechanism, the issue shall be resolved through mediation by MEF.
- If the dispute remains unresolved within two months of a written complaint, both parties may pursue Commercial Arbitration of the Kingdom of Cambodia or international commercial arbitration (Typically Singapore Arbitration).

1.5. The SOP for PPP Projects Volume II: Guidelines on Contract Management – the PPP Contract sets out a predefined step-by-step dispute management process. The intention is to start with relatively simple, quick and efficient processes while leaving open the potential for escalation to more complex, time-consuming and costly processes if the dispute cannot be resolved. These steps comprise:

- Interparty discussion: across different levels of the IA and the Private Partner. If required, the IA may also invite external experts, especially if the disputes are technical in nature.
- Mediation/conciliation discussions between the IA and the Private Partner facilitated by a mutually agreed neutral individual or panel of individuals.
- Arbitration: governed by the Law on Commercial Arbitration.
- Judicial proceedings through the Cambodian legal system.

1.6. The SOPs leave open other aspects of dispute resolution policy and practice.

2. Key Drivers and Considerations for Dispute Resolution

2.1. It should be clearly understood at the outset that unless there is a substantial change in policy in relation to a PPP Project, the Government's objective is usually for it to be completed and to enter into operations as envisioned in the PPP Contract. It follows that disputes should be avoided unless there is no reasonable alternative, and every method should be made to resolve disputes informally and cheaply. Major disputes should also be avoided as they can be damaging to the relationship between the parties and create the conditions for future disputes.

2.2. The experience from many markets is that Private Partners and financiers also consider the provision for alternate dispute resolution options favourably, as they benefit from the reduced cost, complexity and time savings.

2.3. The dispute resolution clauses in a PPP Contract should provide as much certainty as possible about where and how the disputes shall be resolved.

2.4. The issues that typically arise include:

- Requirements for early investigation and an attempt to reach an amicable settlement.
- Defining the process of escalating the dispute via alternative dispute resolution processes.
- Requiring that each party shall continue to perform its obligations under the PPP Contract despite the ongoing dispute. For example, the Private Partner is typically required to continue carrying on the construction works or service operations, despite the ongoing resolution process, under the PPP Contract.
- Joinder and consolidation provisions: The PPP Contract is part of a wider network of agreements between various parties. The IA may prefer that its claim be

handled exclusively between the Private Partner and the IA to avoid additional complexity in resolving the dispute. Alternatively, it may be appropriate in certain cases to consolidate claims where there are areas of overlap (e.g., where a subcontractor's claim under a project agreement is based on a provision passed down from the PPP Contract).

- Waiver of immunities: The IA should consider whether and to what extent the dispute resolution clause in a PPP Contract shall include, where required, a waiver of any privileges and sovereign immunities that the IA may have relating to:
  - Any immunity from any court proceedings or suits initiated by the Private Partner.
  - Any immunity or limitations on being required to recognise any award or judgement.
  - Any immunity or limitations on the execution or enforcement of judgements against the IA's assets.
- The rationale for agreeing to a waiver is that bidders may be reluctant to bid for projects and/or find it difficult to raise financing if they feel they cannot be treated fairly in the event of a dispute. The IA shall assess whether it is bankable to resist a waiver entirely or whether negotiating limitations is an acceptable compromise.
- How the costs of dispute resolution (e.g., management time, legal and other advice, etc.) will be allocated. Once the process has reached arbitration, the losing party is required to pay the winning party. This helps to provide appropriate incentives to settle disputes when one party is in the wrong.

2.5. Case Study 19 highlights the importance of the Private Partner continuing to carry on the construction works or service as per the PPP Contract.

Case study 19: Fare-adjustment dispute in Light Rail Transit (LRT) Line 1, Philippines[97]

Light Rail Manila Corporation (LRMC), led by Metro Pacific Investments Corporation and Ayala Corporation, was awarded a 32-year concession agreement for LRT Line 1 in 2014. Under the PPP Contract, the fares had to be adjusted at a set rate of 10.25% every two years. The IA (Department of Transportation, Philippines) was required to compensate LRMC for any difference between the stipulated and approved fares. The Government did not adjust the fares despite multiple requests from the private operator since 2016. After several attempts to settle the dispute amicably, LRMC filed an arbitration case before the International Chamber of Commerce in 2022. The total compensation is estimated at PHP 2.67bn (USD 45m) due to costs resulting from delays in implementing fare adjustments for 2016, 2018 and 2020.

LRMC continued to operate the rail line and implement operational improvements, rehabilitation projects and system upgrades to the existing system throughout the dispute.

[97] Business World, 2022, DoTr dearing up for arbitration after rejection of LRT-1 fare hike

3. International Best Practice

3.1. Some comparable practices of dispute resolution in benchmark countries are set out in Table 18.

Table 18. Dispute resolution - comparable practices in benchmark countries

Country	Key characteristics
Australia	• The National PPP guidelines outline key principles for dispute resolution.[98] • They provide for a range of non-litigious dispute resolution options, including dispute resolution panel (comprising representative and independent members), independent expert determination, arbitration and other fast-track options. • Under the independent expert determination provisions: – The PPP Contract is required to set out matters for determination by an independent expert. – A list of independent experts may be agreed upon and included in the PPP Contract. The independent expert shall be appointed from that list by agreement between the parties or, failing agreement, by the government selecting from the list. – The decision of the independent expert will be final and binding to the extent permitted by law. However, both parties may dispute it within a specified period or in some circumstances where the value of the determination is greater than a specified monetary threshold. – A timeframe shall be set for the independent expert to deliver a determination. – The costs of the independent expert shall be borne equally by both parties. • Under the arbitration provisions: – The arbitrator will conduct the arbitration in accordance with the Arbitration Rules of the Australian Centre for International Commercial Arbitration and subject to state-specific legislation on Commercial Arbitration. – An arbitrator will be appointed by agreement or failing agreement by a third party, such as the Secretary-General of the Australian Centre for International Commercial Arbitration. – A timeframe will be set for the arbitrator to deliver a determination. – The arbitrator's decision will include a decision relating to the fees and expenses of the arbitrator.

[98] Infrastructure Australia, 2011, National Public Private Partnership Guidelines Volume 7: Commercial Principles for Economic Infrastructure

Country	Key characteristics
	• Under the fast-track process: – Fast-track provision may be provided for the resolution of disputes where the outcome is particularly time critical. – The timeframe of the alternative dispute resolution methods will typically be truncated. – The party shall have the right to institute legal proceedings to seek urgent injunctive, interlocutory or declaratory relief. • To the extent permitted by law, the parties are not entitled to have recourse to the courts on disputes subject to dispute resolution under the PPP Contract. The parties' rights of appeal in respect of an arbitrator's decision are required to be in accordance with the legislation dealing with arbitration in the applicable jurisdiction. • Despite the existence of a dispute, each party is required to continue to perform its obligations under the PPP Contract. **Partnerships Victoria PPP Projects, Department of Treasury and Finance:** • The contract director is required to attempt to ensure that protracted formal disputes are avoided through early intervention and negotiation.[99] • A formal dispute resolution process, provided in the PPP Contract, may be considered if a dispute cannot be readily resolved. • The availability payment PPP standard project deed sets out a step-by-step process for dispute resolution:[100] – Upon the issuance of the notice of dispute by either party, senior representatives shall attempt to resolve the dispute. – The parties can agree to an expert determination if the dispute remains unresolved. The parties shall mutually decide on the expert. – The expert's decision shall be final and binding unless some exclusions are set out in the PPP Contract. – If any party does not agree to expert determination or issues a notice of dissatisfaction, then that party can refer the dispute for arbitration. – The IA and the Private Partner must either agree on the arbitrator, or if not, the Australian Centre for International Commercial arbitration will appoint the arbitrator.

[99] Partnerships Victoria, Policy, Guidelines and templates
[100] Partnerships Victoria, 2018, Availability PPP PV Standard Project Deed - Guidance Notes

Country	Key characteristics
	– The arbitrator's determination will be final and binding on the parties subject to exclusions set out in the PPP Contract. – Either party can appeal to a court on a question of law. • The Department of Treasury and Finance also assists in managing issues and resolving disputes with budgetary implications on government or if the sustainability of the project's contractual and commercial arrangements is at risk.
UK	• As per the HM Treasury guidelines, dispute resolution is typically a three-stage process.[101] – The IA and the Private Partner consult with each other for a fixed time period, possibly involving different levels, in an attempt to come to a mutually satisfactory agreement. – If the consultation fails, the parties may opt for expert determination. The expert is appointed from a panel (e.g., of construction, operation or financial experts). It may be appropriate in certain circumstances to substitute expert determination for other forms of alternative dispute resolution (e.g., mediation). The parties shall share the cost equally. – If either party is dissatisfied, it may refer the matter to arbitration or the courts for a final and binding decision. The PPP Contract shall set out the method of appointing the arbitrator. The costs of the arbitration will be at the discretion of the arbitrator. • It is often proposed that the PPP Contract include a fast–track dispute resolution process to deal with certain pressing issues. • The parties are required to continue to comply with, observe and perform all their obligations under the PPP Contract regardless of the referral of the dispute for resolution.
South Korea	• As per the Act of PPP in Infrastructure - the Minister of Strategy and Finance may establish a committee to mediate PPP disputes in Korea.[102] • Under the draft standard concession agreement, the IA and the Private Partner shall attempt to resolve any dispute arising in connection with the PPP Contract by mutual consultation.[103]

[101] HM Treasury, 2012, Standardisation of PF2 Contracts Draft (UK Government has announced that it will no longer use PF2 for new government projects. However, existing PFI and PF2 contracts will not end because of this announcement)
[102] Ministry of Government Legislation, Korean Law Information Center, 2020, Act on Public-Private Partnerships in Infrastructure
[103] Public and Private Infrastructure Investment Management Center, 2010, Draft Standard Concession Agreement for Build-Transfer-Operate Projects

Country	Key characteristics
	• If the parties fail to resolve a dispute, such a dispute shall be resolved through arbitration of the Korean Commercial Arbitration Board in accordance with the Arbitration Act and the Arbitration Rules. • An arbitration award shall finally and conclusively bind the parties without resorting to any special means for appeal. • The parties may also separately agree to resolve the dispute through court proceedings.
India	• The model concession agreement provides a step-by-step process for dispute resolution:[104] – The first attempt should be to resolve the dispute amicably. For the conciliation, either party may call upon the independent engineer to mediate and assist the parties in arriving at an amicable settlement. – Failing mediation, either party may require the dispute to be referred to the Chairman of the IA and the Chairman of the Board of the Private Party for amicable settlement. – If not resolved, either party may refer the dispute to arbitration by reference to arbitration by a board of arbitrators. The board shall comprise three arbitrators, of whom each party shall select one, and the third arbitrator shall be appointed by the two arbitrators so selected. • In the event of the constitution of a statutory regulatory authority or commission with powers to adjudicate upon disputes, all disputes shall, instead of the reference to arbitration, be adjudicated upon by such body. E.g., the National Highway Authority of India has set up a Society for Affordable Redressal of Disputes (SAROD).

3.2. Case Study 20 highlights the potential for a fast-track dispute resolution mechanism to resolve disputes in a cost-effective and timely manner.

Case Study 20: Fast track dispute resolution of road projects in India[105]

Kiratpur Ner Chowk Expressway Limited, promoted by IL&FS Transportation Networks Limited, was awarded a PPP Build Operate Transfer (BOT) (toll) with a concession period of 28 years by the National Highway Authority of India commencing November 2013. The project involved widening Kiratpur to the Ner-Chowk Section of NH-21, a distance of around 84km, from two to four lanes.

Although financial close was achieved in September 2012, the project was stalled before reaching commercial operations. The Private Partner initiated the termination of the

[104] NITI Aayog, Public Private Partnership in Operation and Maintenance of Passenger Ropeways Model Concession Agreement (Draft)
[105] The Economic Times, 2020, NHAI clears IL&FS claims of Rs 902 crone

concession agreement in 2018, attributing the reason for termination to delays in receiving necessary rights of way from the government, resulting in a substantial project cost over-run.

The dispute was over the Private Partner's entitlement to compensation under the terms of the PPP Contract. In January 2020, the National Highway Authority of India (NHAI) Conciliation Committee fast-tracked the dispute and cleared IL&FS' claims of Indian Rupee (INR) 672 crore (USD 82m).

4. Guiding Principles

4.1. Contract Preparation Guidelines

4.1.1. The PPP Contract should require the parties to attempt in good faith to reach an amicable settlement before resorting to other dispute resolution methods.

4.1.2. The PPP Contract should provide a step-by-step process for dispute resolution with a prescribed time limit (i.e., the time for which the dispute resolution method is allowed to run before being escalated to the next level).

4.1.3. The IA should ensure the enforceability of all the alternative dispute resolution methods under relevant legal and regulatory frameworks.

4.1.4. For each dispute resolution method, there should be provisions addressing the process, the scope of matters that can be addressed, the payment terms, etc., to provide certainty about where and how the disputes shall be resolved.

4.1.5. The PPP Contract should require that both parties continue to perform their obligations under the PPP Contract despite the ongoing dispute.

4.1.6. The PPP Contract should provide optionality for the IA to accept or reject joinder requests as appropriate.

4.1.7. IAs should carefully consider the bankability of the Project with and without any potential waivers of immunities. Any proposal to waive any immunity that departs from the default clause in the MEF's template PPP contract is subject to prior consultation and approval of MEF before draft PPP Contracts are issued to bidders.

4.1.8. The PPP Contract should provide for how the costs of dispute resolution will be treated. For less formal methods of dispute resolution, it may be appropriate to allow both parties to bear their own costs. It is generally expected that PPP Contracts will require the reasonable costs of arbitration for both parties should be paid by the losing party.

4.2. Implementation Guidelines

4.2.1. The IA shall prioritise and seek to resolve disputes via informal negotiation with the Private Partner before accessing more formal dispute resolution processes.

4.2.2. The parties should consider opting for an independent chair to preside over any inter-party meetings.

4.2.3. When external advice is required, IA shall appoint consulting counsel with knowledge and experience in resolving the relevant type of dispute (e.g., transnational disputes).

4.2.4. The IA shall ensure that the Private Partner continues to honour their obligations as per the PPP Contract while the resolution process is being carried on.

XIV. STATE STEP-IN RIGHTS

1. Overview

1.1. In limited circumstances, the IA may wish to take over the role of the Private Partner in order to address:

- Serious deficiencies in performance, or
- A situation, not related to performance, that either has an impact on the project or requires access to the project to resolve.

1.2. Step-in accordingly refers to the process of stepping into the shoes of the Private Partner and taking over their responsibilities. By stepping in, the IA effectively takes over some or all of the Private Partner's contractual obligations to run the PPP Project for a limited period to rectify the situation without terminating the contract. The rationale for step-in is that the IA may be in a better position to solve some types of problems or may have broader objectives in relation to a problem necessitating control of the infrastructure, than the Private Partner.

1.3. Article 29 of Cambodia's Law on PPPs provides that the parties to the PPP Contract may agree on the provision of step-in rights in favour of the lender(s) to the Project and/or the Government. This section addresses step-in by the IA, with lenders' step-in discussed in Section XV (Lenders Step-in Rights).

1.4. The PPP Contract should set out:

- The circumstances giving rise to the IA's right to suspend the Private Partner's rights and obligations.
- The IA's right to assume total or partial management and control of some or all of the project assets and project activities.
- The consequences of suspension and step-in by the IA.
- The obligations on the Private Partner to assist the IA via the provision of access rights, information and other relevant resources and to avoid hindering the IA's legitimate exercise of its step-in rights.

2. Key Considerations

2.1. Circumstances Giving Rise to a Right to Step-In

2.1.1. Step-in is a highly significant process that significantly alters the responsibilities of both parties. The rights should be very clearly defined in the contract. Typical elements of defining step-in include:

- The circumstances in which step-in can arise.
- The scope of the IA's right to act (i.e., what functions it can step into, and limiting the step-in to what is necessary to address the circumstances).
- The IA's right to act directly and/or to appoint a third party to act on its behalf.
- The suspension of the Private Partner's rights to manage and operate the project (i.e., removing responsibility for the functions transferred to the IA).
- Confirming that the other rights of the parties (e.g., rights to terminate the PPP Contract) are not affected.

2.1.2. Common examples of where step-in may be appropriate include:

- A significant failure by the Private Partner to meet its obligations under the PPP Contract.
- Emergencies, where intervention by the IA and the emergency services (e.g., fire, police, military) is necessary.
- Social or environmental risks, where intervention by the IA is necessary to protect the health and safety of people (e.g., staff, occupants, users or the general public), animals, property (of third parties or the facility/works themselves) and/or the environment.
- Statutory duty, where the IA is under a duty specifically placed on it by legislation to ensure the provision of certain essential services and the fulfilment of that duty by the Private Partner on behalf of the IA is at risk.

2.1.3. The circumstances giving rise to a right to step-in should be proportional to the importance of the service (in respect of both the drafting of the right to step-in in the PPP Contract and the decision to actually exercise the power to do so). Safety and security are often key drivers, as such issues require an immediate conclusive response. Infrastructure that can cause widespread economic damage if services are interrupted, such as major power generators, roads, ports or airports, may also justify a step-in on economic grounds.

2.1.4. Step-in may not be appropriate for all types of PPP Projects. If the IA does not have relevant operating experience for the type of PPP Project and there is no scope to find suitably qualified contractors to assist it, the IA may not wish to invoke step-in rights. In such cases, the IA may elect to rely instead on other contractual provisions, such as Private Partner default or force majeure. The IA should only draft and then exercise step-in rights where it reasonably believes that it (or a third party it appoints) is better placed to act than the Private Partner and that such action is essential in the circumstances.

2.2. Obligations and Rights During Step-In

2.2.1. The scope of the IA's step-in rights is considered to be a key bankability consideration. Step-in by the IA can significantly impact the Private Partner's overall rights, obligations and liabilities under the PPP Contract. For example, if the IA or its appointed third party implements a technical solution for a specific aspect of the PPP Project, which is different from the solution planned by the Private Partner, this may impact maintenance and operational risk of the project at a later stage.

2.2.2. The Private Partner will therefore seek to ensure that the IA's right to intervene is well-defined and limited to only essential interventions. To protect the Private Partner, contractual mitigations can include an obligation upon the IA to use qualified third parties and/or an obligation to inform and involve the Private Partner during the step-in. The IA is generally not under any obligation to achieve success in attempting to remedy the situation giving rise to the step-in. In addition, the ability to step in should always be drafted as the IA's right and not create an obligation on the part of the IA to act.

2.2.3. The PPP Contract usually requires the Private Partner to:

- Assist the IA during step-in by providing access rights and resources (including personnel) as reasonably required.

– Avoid hindering the IA's legitimate exercise of its step-in rights.

2.2.4. In Cambodia, the current practice is for a 30-day period of consultation by the parties, followed by the issuance of a formal notice requiring rectification. The Private Partner then has 60 days to remedy the default. If this is not achieved, the IA may suspend the project and step in to remedy the issue for as long as it is necessary to do so. The costs and risks of the step-in are borne by the project company (unless the situation qualifies as a relief event).

2.2.5. The Government may also step into any project and assume the exclusive care, custody and control of any facilities if required for national security. In this case, the Government and parties are required to mutually agree how to address the direct financial impacts.

2.2.6. This process is broadly similar with step-in rights in other jurisdictions, with default events and broader exigent circumstances both adopted as justifying step-in. The IA in other countries is often granted more flexibility on the timing of entry to allow for any need for urgent rectification, rather than having fixed notice periods. Other countries have also provided broader definitions around non-default situations, focused on potential significant disruption to the health or safety of persons, the environment, any property or the safe and secure performance of the Private Partner's obligations.

2.2.7. In some circumstances, events giving rise to step-in may also fall under another contractual provision, such as force majeure, change in law, default by a Private Partner, etc. The step-in provisions will need to dovetail with these provisions in terms of mechanics and consequences to ensure consistency and avoid duplication.

2.3. Step-In Compared to Other Remedies

2.3.1. Step-in may take place after other remedies, such as abatement of payments, default and rectification, have been exhausted. In this scenario, step-in is an escalation in the use of tools to resolve a problem when less serious measures have been unsuccessful.

2.3.2. In other circumstances, it may be impossible to give prior notice (e.g., in an emergency). The PPP Contract should also provide for such situations where notice, abatement and other measures would not be practical.

2.4. Leaving Step-In

2.4.1. Step-in is generally a temporary measure, subsisting for as long as is necessary to resolve the situation. The PPP Contract will provide for the IA being able to 'step out' when the event has ceased or been remedied. If the step-in is likely to be for an extended period, with no defined expectation of ending, the IA may wish to terminate the PPP Contract instead.

2.4.2. Consistent with the view that the IA is not under an obligation to step in, the IA is usually able to step out at any time on reasonable notice to the Private Partner. The effect of step-out is that the Private Partner recommences the performance of the affected obligations after the relevant notice period.

2.5. Risk Allocation

2.5.1. Allocation of responsibility for the consequences of step-in depends on the circumstances leading to the step-in. In general:

- If step-in is a consequence of the Private Partner's default in the first instance, most PPP Contracts allocate full responsibility for the consequences of step-in to the Private Partner.
- If step-in is due to a risk only partially allocated to the Private Partner, the risk may be shared or may depend on the degree of involvement or effect of the step-in measures.
- If step-in is not due to any default on the part of the Private Partner, the IA will be responsible for the consequences of step-in.

2.5.2. An example approach to risk allocation between the Government and Private Partner during the construction and operation phases is shown in Table 19.

Table 19: Example approach on risk allocation in the event of state step-in[106]

Project	Construction phase	Operation phase
Step-in on Private Partner default	• Private Partner will not be entitled to an EOT or compensation in respect of its costs and losses.	• IA should consider whether the Private Partner ought to be entitled to payment in full (as if the service had been fully performed) or in part (i.e., reflecting the Private Partner's failure to perform the affected obligations), which may result in no payment being due.
Step-in with no Private Partner default	• Private Partner is entitled to an EOT and compensation in respect of its costs and losses.	• Private Partner is entitled to payment in full as if the Private Partner had fully performed the service.

2.5.3. The economics for the Private Partner should take into consideration adjustments for:

- Deductions for any operating cost savings the Private Partner makes during the step-in period on services unaffected by the step-in event.
- In the case of Private Partner default, deductions for any costs and liabilities incurred by the IA.
- For parts of the service still provided by the Private Partner and unaffected by the IA's step-in, standard unavailability or performance deductions, where applicable.

2.5.4. Such adjustments might result in reduced availability payments (for availability PPPs), or reduced share of revenue (for user-pays PPPs).

2.6. Other Agreements

2.6.1. Any other agreements signed by the Private Partner with other parties (e.g., financing or construction agreements) should acknowledge the IA's rights to step in by including appropriate provisions in those agreements, as well as passing down any corresponding financial impacts (e.g., the withholding of payment in response

[106] The World Bank, 2019, Guidance on PPP Contractual Provisions, 2019 Edition

to the Private Partner's default) that may arise as a result of step-in, depending on the risk allocation as outlined in Section Risk Allocation.

3. International Best Practise

3.1. Some comparable practices to state step-in rights in benchmark countries are set out in Table 20.

Table 20: Step-in rights - comparable practices in benchmark countries

Country	Key characteristics
Australia[107]	• The Government may assume all or some of the service delivery obligations of the Private Partner for a period of time when: – There is an emergency, a serious risk to the structure of the facility or the works, the environment, the public or users of the facility, or a serious risk of material damage to public or private property. – Step-in is necessary to discharge a statutory duty, or – In some jurisdictions, there has been an event of default. • The Government is not obliged to remedy or cure any breach or termination event to mitigate any risk in respect of which it exercises step-in rights. • Any loss suffered or incurred by government arising out of or in connection with the exercise of its step-in rights is a debt payable by the Private Partner. The Private Partner will not be entitled to make any claim arising out of or in connection with the exercise of step-in rights unless government has acted grossly negligently, fraudulently or in bad faith in the exercise of those rights. • The financiers should recognise and acknowledge the step-in rights of government and the priority of government to payment of any loss incurred from the exercise of step-in rights.
UK	• Under the now discontinued PF2 standard form PPP Contract[108], step-in is activated when the IA notifies the Private Partner in writing of: – The action it wishes to take. – The reason for such action. – The date it wishes to commence such action. – The time period which it believes will be necessary for such action. – To the extent practicable, the effect on the Private Partner and its obligation to provide the service during the period such action is being taken.

[107] Department of Infrastructure and Regional Development, 2011, National Public Private Partnership Guidelines Volume 7: Commercial Principles for Economic Infrastructure.

[108] While the PF2 form of contract is no longer in use for new UK PPP Contracts, similar models are still deployed in Wales and Scotland. Further, circa 700 projects in the UK still operate under the PF2 models.

Country	Key characteristics
	• If the Private Partner is in breach of an obligation under the PPP Contract and fails to remedy it within the agreed time period, government has the right to step-in and carry out such rectification at the Private Partner's expense. The IA should be entitled to set off any costs incurred (i.e., for both costs of work and advice and time devoted to running the operations) against the contractual payments to the Private Partner. • If there has been no breach by the Private Partner, the IA should bear all the costs that it has incurred by stepping in.
Singapore	• If the Private Partner consistently fails to meet performance requirements, the IA can ensure that service levels are restored by invoking step-in rights to take over operation under certain circumstances, even where there is no default by the Private Partner. • Examples of such circumstances include where there is: – Serious risk to public health, safety or the environment, or – Serious national security implications.
Netherlands[109]	• Contractual step-in is only applicable to cases of Private Partner default. • If a Private Partner default occurs and the Private Partner has not remedied it within a reasonable time period determined by the IA, the IA may step in to remedy the default itself or appoint a third party to do so. • The IA will subsequently recover from the Private Partner compensation equivalent to the relevant costs incurred to remedy the Private Partner default, increased by a 10% surcharge, including: – Costs paid by the IA to third parties, and/or – Internal costs incurred by the IA as determined by the standard internal direct pricing.

4. Guiding Principles

4.1. The PPP Contract should set out:

– The IA's right to step in and assume total or partial management and control of some or all of the project assets and project activities and suspend some or all the Private Partner's rights and obligations.

– Consequences of suspension and step-in by the IA.

– Obligations on the Private Partner to assist the IA via the provision of access rights, information and other relevant resources, and to avoid hindering the IA's legitimate exercise of its step-in rights.

[109] Government of the Netherlands, 2012, Model DBFM Agreement Infrastructure 2012

4.2. Step-in provisions should dovetail with other related provisions (such as force majeure, change in law, default by Private Partner, etc.) in terms of both mechanics and consequences to ensure consistency and avoid duplication.

4.3. The IA should be able to step out when the event triggering the step-in has ceased or been remedied or upon reasonable notice to the Private Partner. The IA is under no obligation to step in or, having stepped in, to remedy the circumstances that caused the step-in.

4.4. Where a step in event occurs, the resulting financial impact or delay to project delivery and/or operations should be borne by the party causing the event.

4.5. In deciding whether to exercise step-in rights, the IA should consider if it has the relevant operating experience or if it is able to engage the services of qualified contractors. The IA should exercise step-in rights only where it reasonably believes that it (or a third party it appoints) is better placed to act than the Private Partner and that such action is essential in the circumstances.

4.6. If the step-in is likely to be for an extended period, with no defined expectation of ending, the IA may wish to terminate the PPP Contract instead.

XV. LENDER STEP-IN RIGHTS

1. Overview

1.1. The Private Partner typically creates a special purpose vehicle (SPV) project company, financed through a combination of the Private Partner's equity and loan funds raised from third-party lenders, for the project. Under this arrangement, lenders typically have no or limited recourse against the Private Partner's own resources beyond the equity committed to the project. The cash flows generated by the project company are, therefore, the primary security for required loan repayments.

1.2. Any disruption to the project's revenue stream can adversely affect the company's ability to repay the loan. Accordingly, lenders and their technical advisors closely monitor whether the project will be built on time and to the specifications in the PPP Contract. Once the project is operational, they will continue to monitor it to ensure that service delivery is up to the requirements of the IA.

1.3. Lenders often negotiate a right in the project lending agreements to take over the management of a project if it perceives that the Private Partner is failing to an extent that puts the security for the loan at risk. Such step-in rights allow lenders to 'step in' to the role of the Private Partner to rectify issues.

1.4. Lenders' step-in rights are typically triggered upon the issuance of a default notice by the IA containing details of the existing liabilities or unperformed obligations of the Private Partner or non-performance of obligations under the loan agreement. The lenders are then typically allowed a period of time by the IA to remedy the issue before the IA takes further action, such as termination.

1.5. Having exercised their step-in rights, lenders may seek to remedy the situation by:

- Curing the breach, e.g., remedying the failure of the project company to make a payment to a contractor that was delaying the completion of works.
- Novating the rights and obligations of the defaulting Private Partner under the PPP Contract to a new Private Partner.

1.6. General insolvency laws may give similar rights to lenders in some circumstances, e.g., the right to vote on a financial restructuring plan or to appoint an insolvency administrator. In the case of voluntary liquidation and dissolution of a company, the Ministry of Commerce is the institution that administers the certificate of dissolution. Likewise, any interested person may, at any time during the liquidation of a company apply for a court order that the liquidation be continued under the supervision of the court. These rights can be slow and accessible only once the SPV is actually in or nearing insolvency. Step-in rights give lenders earlier and more rapid options for correcting a failing PPP before problems become critical.

1.7. The Law on PPPs[110] and SOPs enable IAs to include lender step-in rights in the PPP Contract. An additional agreement (called a tripartite agreement) between the IA, the lenders and the Private Partner is usually executed at the same time as the PPP Contract to set out the circumstances in which the rights can be used, and the sequencing of when each party can exercise its rights relative to the other parties.

---

[110] Government of the Kingdom of Cambodia, 2021, Law on PPPs (Article 29), Government of the Kingdom of Cambodia, 2022, SOP for PPP Projects, Volume III Procurement Manual (Part IV: Draft PPP Contract)

1.8. The guidance leaves the form of drafting for lenders' step-in open to provide flexibility to address the circumstances of each project.

1.9. The Government's primary interest in a PPP Project is usually the completion of construction and successful operation as originally planned. Giving lenders the right to fix a project in trouble before the Government intervenes improves bankability and provides a pathway back towards success without resorting to more extreme measures, such as termination by the IA.

2. Key Issues in Step-in

2.1. Elements of the Lender's Step-in Arrangement

2.1.1. The key elements of a typical step-in arrangement include:

- Mutual obligations of the parties (i.e., lenders and the Government) to notify each other in case of default under the PPP Contract or any relevant project agreements.
- A time period granted during which lenders can communicate an intention to exercise their step-in rights.
- A 'standstill' period during which the IA will not terminate the PPP Contract or any related agreements, provided that the lenders are making diligent efforts to remedy the events leading to step-in—the period is usually negotiated based on the time needed by the lenders to act, but is usually capped at six months.[111]
- Consent to the assignment of the PPP Contract and related receivables to the lenders.
- A right for the lenders to novate the defaulting Private Partner's rights and obligations to a substitute Private Partner.
- The IA's obligation to enter into a new direct agreement with the lenders to the substitute Private Partner on substantially equivalent terms.

2.2. Form of Documents

2.2.1. Lender's step-in rights bind the lender, the Private Partner and the IA. Accordingly, they often form part of a separate document called the lenders' tripartite agreement, or simply a tripartite agreement, with tripartite referring to the agreement being between the three parties.

2.2.2. There may also be other agreements documenting the lender's step-in rights, such as in agreements between the lender and the main contractors providing the works. These require the contractors to acknowledge the step-in right and ensure that the lenders will be able to instruct the contractors in a step-in situation.

2.3. Contract Preparation

2.3.1. The lenders' step-in regime should normally include the following rights for the IA:

- The right to consent as a condition precedent to any step-in action by the lenders.
- The right to impose a time limit on the lenders' attempts to rectify the Private Partner's defaults (this is usually capped at six months but may be shorter).
- The right to approve or reject the lenders' remediation plan, which should provide a comprehensive overview of the current project state, the advantages and disadvantages to the IA of any proposed remediation options, the risks involved,

[111] Partnerships Victoria, 2018, Availability PPP PV Standard Project Deed - Guidance Notes

any longer-term social or economic risks, and detailed programming of remediation activities.

- The right to approve or reject any substitute Private Partner selected by the lenders (see Section 2.6 Acceptance of a New Private Partner).
- Continuing rights of termination to protect itself against failures to rectify and new breaches by the lenders or the substitute Private Partner.
- A limit on the number of extensions and grounds on which the lenders may request an extension.

2.4. Implementation of Step-in Action

2.4.1. The IA has a key role in monitoring any step-in by the lenders exercising its rights. In doing so, the IA should consider:

- The current state of the project and the likelihood of project failure or other adverse outcomes if proposed actions are not taken.
- The risk of temporary disruptions in the project and services to the public during the step-in, step-out phase.
- The transitory and long-term impacts on the project in terms of the quality or timing of delivery, changes to project costs, etc.
- The impact of proposed changes on the Government (e.g., any adverse fiscal consequences, political or social consequences, etc.).
- If it is proposed to substitute the Private Partner, whether the new Private Partner has the adequate financial resources and technical expertise to deliver and operate the project.
- Any impacts on the project feasibility (e.g., if the new Private Partner is proposing additional debt due to an intention to refinance the project).
- The quality and integrity of any new lenders.

2.5. Financial Responsibilities

2.5.1. As a general proposition, the IA does not obtain new rights against the Private Partner or lenders as a result of step-in. Lenders act on a best endeavours basis to secure the Project and the continuation of the PPP Contract in order to ensure that their loans can be repaid but do not assume more liabilities than before (unless these are negotiated between the parties as part of the solution). The benefit to the IA is that the Project may be restored to compliant performance under the PPP Contract instead of being placed into termination by the IA, which may be a worse outcome for both the IA and the private sector.

2.5.2. It is possible that, in acting as the manager of a project, lenders may expose themselves to liabilities to third parties due to the operation of other laws, e.g., environmental liabilities. This, along with typically limited experience in the detail of project operations, may explain the general reluctance of lenders to step in to projects unless absolutely necessary.

2.6. Acceptance of a New Private Partner

2.6.1. In the event that the project cannot be remedied by the lenders while the original Private Partner remains in place, the lenders may propose to substitute a new

Private Partner as part of its plan to avoid termination. The PPP Contract will typically grant the IA the right to approve or reject any replacement of a Private Partner.

2.6.2. In exercising this right, the IA should be aware that:

- The process is not competitive, i.e., the IA does not have the ability to select the best option from a pool of bidders and its ability to negotiate is limited.
- The process is often conducted under urgency, as remedial action generally needs to be timely to be effective.
- Rejection of the substitute Private Partner could have significant adverse consequences for the PPP, including termination, which would result in the IA having to assume responsibility for the Project.

2.6.3. Accordingly, standards for the acceptance of the substitute Private Partner will generally be lower than they would be in the context of a competitive bidder evaluation. The IA should receive information regarding the substitute Private Partner analogous to the qualifying information required to have been submitted by bidders on the Project, although the specific requirements will be negotiated by the parties making reasonable allowances for the factors mentioned previously.The IA should still satisfy itself that the substitute Private Partner is an appropriate person to enter into a significant contract with the Government, and consider whether it will meet the minimum qualifying criteria for a Private Partner from the original tender evaluation process. The IA should also satisfy itself that the transition plan to the new Private Partner is based on reasonable assumptions and is appropriately resourced.

2.7. Case Study 21 and Case Study 22 showcase some relevant examples where the step-in rights were exercised by lenders.

Case study 21: Karnataka Build Operate Transfer (BOT) road project[112]

Lanco Devihalli, a SPV established by Lanco Infratech, was awarded a 25-year concession to build-operate-transfer an 80-km road stretch along NH-48 in Karnataka by NHAI in January 2008. The project was completed in June 2012, and the toll collections began during the same time.

As a result of project delays and lower than estimated toll revenue, the Private Party started to default on its debt obligations. Lanco Infratech, the parent company of the SPV, was also facing insolvency proceedings.

The lenders exercised their substitution rights and replaced Lanco Devihalli with a new SPV, Nelamangala Devihalli Express, as the new concessionaire in January 2021 for the remaining 12 years of the concession. Singapore-based Cube Highways and Infrastructure incorporated the new SPV.

This case study was successful from the point of view of the IA as there was no disruption in public service and no additional funding was required from the government.

[112] Financial Express, 2018, Lenders to replace Lanco Devihalli as operator of NH-48 in Karnataka, Business Standard, 2021, Cube Highways replaces Lanco in 80-km Nelamangala-Devihalli highway project

Case study 22: Sydney Cross City Tunnel project[113]

Cross City Tunnel Group was awarded a 30-year PPP concession to build, own and operate the Cross City Tunnel until 2035. Cross City Tunnel is a 2.1 km-long tunnel in Sydney that links Darling Harbour to Rushcutters Bay. The tunnel commenced operations in August 2005. However, due to low traffic volumes, the project company became insolvent in 2006, accumulating debts of over AUD 500m.

The lenders exercised their step-in rights and appointed a receiver to sell the project assets to new equity investors. In June 2007, Royal Bank of Scotland, EISER Infrastructure Partners and Leighton Contractors were chosen as preferred purchasers of the Cross City Tunnel Group for AUD 700m, which enabled the lenders to be repaid and allowed a partial return of equity to the original equity investors.

However, the new owners failed to refinance their debt over stamp duty disputes with the government. As a result, the new owners placed Cross City Motorway into voluntary administration in September 2013. Transurban, a toll road owner, bought AUD 475m in debt and took control of the tunnel in June 2014.

This case study underlines the importance of selecting a suitable Private Partner with a robust financing strategy for the successful implementation and operations of the project.

3. International Best Practice

3.1. Some comparable practices of how lenders' step-in rights provisions operate in benchmark countries are set out in Table 21.

Table 21: Lenders' step-in rights - comparable practices in benchmark countries

Country	Key characteristics
Australia	• The National PPP Guidelines supports granting lenders the right to cure any default before government has the right to terminate the PPP Contract.[114] • Formal guidance on contractual terms for lenders' step-in rights and IA's consent rights is not provided. • Separate guidance provided by selected Australian states is given below: **Partnerships Victoria PPP Projects, Department of Treasury and Finance:** • Partnerships Victoria's contract management guidance provides for lenders' rights to cure and step-in.[115] • The rights and obligations of the lenders, the IA and the Private Partner are regulated by a direct agreement. The direct agreement

113 The Sydney Morning Herald, 2013, Cross City Tunnel in administration, The Sydney Morning Herald, 2014, Cross City tunnel sold to Transurban for $475m

114 Infrastructure Australia, 2008, National Public Private Partnership Guidelines: Overview

115 Partnerships Victoria, Policy, Guidelines and templates

Country	Key characteristics
	is required to provide a transparent cure regime covering: – Lenders' right to provide a cure program to government. – An obligation on the lenders to diligently pursue the cure program. – Maximum cure period available to the lenders. – Lenders' right to request an extension of the cure period in limited circumstances. • Partnerships Victoria has developed draft state project documents, including a draft direct agreement representing government's preferred contractual position. • IAs may only consider departures from these provisions where there is a benefit to government. **Australian Capital Territory Government Partnerships Framework:** [116] • The Territory's PPP Guidelines provide that lenders typically have preferential advance step-in rights to remedy performance shortfalls by the Private Partner. • No detailed guidance is provided on the requisite formal arrangements and rights of the IA in the case of lenders' step-in.
UK	• HM Treasury provides a detailed approach to the relationship between the IA and the lenders in the event of a termination notice for default by the Private Partner.[117] • During the step-in period, the lenders should ensure that a remedial programme is implemented in relation to the breach and that no new breaches occur. If the breach is not remedied or new breaches occur, then the IA's right to terminate can arise again. • If rights are novated to a new party, the IA and the Private Partner/lenders have the right to amend the PPP Contract in certain respects. e.g., if the parties agree that the performance and payment mechanism are not currently incentivising the parties correctly. • The guidance also provides proposed drafting for the direct agreement covering step-in mechanics and terms for novation. • At a minimum, the clauses provided in the guidance are required for any direct agreement entered into by government agencies. HM Treasury has to approve any proposed amendments to the clauses.

[116] ACT Government, 2016, Guidelines for Public Private Partnerships
[117] HM Treasury, 2007, Standardisation of PFI Contracts Version 4

Country	Key characteristics
	• Lenders may request that the IA approve the remediation plan the lenders intend to implement before the step-in becomes effective. In this case, the IA should only approve the plan if it does not involve the IA assuming additional commercial or financial risk or obligations. • The IA is given the right to approve the selection of any substitute Private Partner by the lenders, as long as such approval is not unreasonably withheld or delayed.
India	• PPP Contracts are guided by the model concession agreements published by NITI Aayog, the public policy think tank of the Government of India. • The model concession agreement provides that lenders have the right to substitute the defaulting Private Partner and that the IA will delay the termination of the PPP Contract for a defined period.[118] • A draft substitution agreement is provided as guidance for developing PPP Contracts. • The substitute Private Partner is required to fulfil the eligibility criteria laid down by the Government for shortlisting the bidders for the award of the concession. The lenders may request a waiver of the eligibility criteria in the interest of the project. • The IA's approval is required to transfer the concession to any substitute Private Partner.
South Korea	• Lenders are required to consult with the IA before any exercise of their security rights on the ground of non-performance of obligations under the loan agreement. • Lenders' step-in rights in case of probable termination by the IA are not covered under the PPP Act and the PPP Contract.
New Zealand	• The New Zealand Infrastructure Commission states that a typical PPP Contract framework includes the execution of a direct agreement between the lenders, the IA, and the Private Partner. A draft direct agreement is provided for the development of PPP Projects.[119] • The draft direct agreement provides that the IA's consent is required for the proposed remedial program.[120]

[118] NITI Aayog, Public Private Partnership in Operation and Maintenance of Passenger Ropeways Model Concession Agreement (Draft)

[119] New Zealand Infrastructure Commission Te Waihanga, Contractual Framework for the Standard Form Public Private Partnership (PPP) Project Agreement

[120] New Zealand Infrastructure Commission Te Waihanga, Standard Form Public Private Partnership (PPP) Project Agreement: Model Schedules

Country	Key characteristics
	• The IA has to approve any novation of the project agreements after determining the suitability of the substitute Private Partner. The substitute Private Partner should: • Not be an unsuitable third party. • Have the legal capacity, power and authority to become a party to and perform the obligations of the Private Partner under the PPP Contract. • Demonstrate appropriate qualifications, experience and technical competence and have adequate resources to perform the obligations of the Private Partner under the PPP Contract.

4. Guiding Principles

4.1. Contract Preparation Guidelines

4.1.1. A tripartite agreement should be executed amongst all the concerned parties – the IA, lenders and the Private Partner – setting out a clear and lenders' step-in regime and consent rights for the IA. The direct agreement shall be consistent with all the applicable laws.

4.1.2. Step-in provisions should provide for consultation by lenders and consent by the IA before lenders exercise their step-in rights, with sufficient time (taking into account that the situation giving rise to the step-in may be urgent) for the IA to properly evaluate the situation.

4.1.3. Step-in provisions should be negotiated and agreed as part of the process of negotiating the main PPP Contract so that new issues are not introduced or re-negotiated post-award of the PPP Contract.

4.1.4. Step-in provisions are not intended to alter the underlying rights and obligations between the IA and the SPV under the PPP Contract—they simply provide for a period of forbearance in the enforcement of those rights to allow lenders the opportunity to remedy issues of non-performance.

4.1.5. Step-in provisions should provide scope for lenders to submit a remediation plan to the IA for their consideration and approval. The decision of whether to approve should not be unreasonably withheld.

4.1.6. IAs should have the right to approve or reject any substitute Private Partner proposed by the lenders but should provide reasonable and objective criteria for their decision.

4.2. Implementation Guidelines

4.2.1. IAs are required to consult closely with MEF once the IA identifies the possibility of an event of lender step-in.

4.2.2. In making decisions regarding lenders' step-in, IAs should be guided by maximising VfM, taking into account:

- The fact that, in general, step-in is a desirable approach for an IA, which may otherwise be faced with the prospect of a failed PPP requiring direct intervention by the IA.

- The specific circumstances that have resulted in the proposal to step in, and whether step-in is likely to lead to an improvement in VfM compared to the alternative.

4.2.3. All approval decisions regarding lenders' step-in, including whether to approve a step-in, whether to approve a remediation plan, or whether to approve the appointment of a substitute Private Partner, should only be taken after considering all the relevant circumstances. Decisions should not be withheld unreasonably.

4.2.4. All decisions regarding lenders' step-in should be taken as promptly as reasonably possible, allowing time for proper consideration but also taking reasonable account of any timing constraints or consequences raised by the PPP Company or lenders.

XVI. TERMINATION OF PPP CONTRACT

1. Overview

1.1. Under Article 41 of the Law on PPPs, there is a strong presumption that the initial term of a PPP Contract should be no more than 30 years and can be less based on the expected life of the project assets and the period the Private Partner requires to recover its cost of investment.[121] The Government may determine the initial term to be beyond 30 years where it is necessary. In the usual course, the PPP Contract will run for this full term.

1.2. There are circumstances where the PPP Contract may be terminated before the expiry date. Article 42 of the Law on PPPs state that the PPP Contract should specify the circumstances for early termination and specify the rights and obligations of both parties to be fulfilled, as well as mechanisms and formulas for calculating compensation in the event of early termination. The specific details of determining these matters are left for the IA, in consultation with MEF, in each case.

1.3. An early termination is a serious event with potential financial and reputational consequences for both parties, including possible impacts on the willingness of the private sector to enter into future contracts with the Government. Accordingly, it is generally seen as a last resort after all other attempts to remedy the situation leading to termination have failed (i.e., plans to cure curable defaults have been unsatisfactory, step-in rights cannot or have not resolved the situation, etc.).

2. Steps for Terminating the PPP

2.1. After exhausting all other means of resolving a dispute with the Private Partner, an IA may wish to terminate the PPP Contract. The IA should seek external professional legal and financial advice regarding the decision to terminate a PPP Contract.

2.2. When considering exercising a right to terminate under the PPP Contract, the IA should:

- **Consider alternative solutions to termination**: the actual decision to terminate is extremely serious and should only be contemplated as a last resort after the IA has made a sincere, diligent effort to resolve the situation by other means in cooperation with the Private Partner. This step involves consulting with MEF where required.
- **Review the PPP Contract**: the IA must review the PPP Contract and identify the provisions that govern termination, including grounds for termination and procedures to be followed.
- **Evaluate the impact**: the IA must assess the impact of termination on the project and the parties involved, including the Private Partner, the public sector, and any third parties including lenders. This includes understanding the financial and non-financial aspects such as reputational impact to the IA.
- **Notify the Private Partner**: the IA must notify the Private Partner in writing of its intention to terminate the contract in accordance with the notification procedure set out in the PPP Contract.

[121] Government of the Kingdom of Cambodia, 2021, Law on PPPs (Article 41)

- **Consider dispute resolution methods**: if appropriate, the IA and the Private Partner may negotiate a settlement to resolve any disputes related to termination.
- **Implement the termination**: if a settlement cannot be reached, the IA must implement the termination as provided in the PPP Contract, including any necessary actions such as payment of compensation, transfer of assets and liabilities. The Private Partner must ensure a smooth transfer of assets and liabilities to the IA or to a third party as specified in the PPP Contract.
- **Finalise the termination**: the IA must finalise the termination by carrying out the necessary administrative and legal procedures. Exercising the IA's right of termination must be in accordance with the SOP for PPP Projects Volume II: Contract Management Guidelines, including seeking approval from the Head of the Government. The IA should document the termination including any settlements or compensation paid to the Private Partner.
- **Ensure continuity of services**: the IA must ensure continuity of services to the public during and after the termination of the PPP.

3. Early Termination Provisions

3.1. Including clear provisions in the PPP Contract on early termination gives the parties certainty as to the mechanics and consequences of early termination without the need to rely on costly and often lengthy disputes.

3.2. The IA should assess the termination provisions as part of the key commercial principles when developing the PPP Contract.

3.3. At the stage of preparing the PPP Contract, it is usual to include provisions setting out:

- The events or conditions that give rise to one or more parties having the right to terminate the PPP Contract.
- The principles of any termination compensation that may be paid by one party to the other.
- The formulas for calculating compensation in the event of early termination.
- The payment procedures.
- The effect of the termination.

3.4. Events Giving Rise to Early Termination

3.4.1. The PPP Contract should set out a detailed list of all the events that entitle a party to terminate, which typically include events under the following headings:

- Termination for a contract default committed by the Private Partner giving the IA the right to terminate.
- Termination for a contract default committed by the IA giving the Private Partner the right to terminate.
- Termination for prolonged force majeure by either the IA or the Private Partner.
- Voluntary termination by the IA (also referred to as termination for convenience).

3.4.2. The first three of these are normally broken down into more detailed lists of qualifying events, as set out in Table 22.

Table 22: Early termination typical events

Termination grounds	Typical events for termination
Private Partner default events	Generally, the IA has the right to terminate for material breaches of the Contract, such as: • Failure to achieve construction milestones. • Persistent failure to meet performance standards. • Abandonment of the project. • Unremedied material and/or persistent breach of the PPP Contract. • Failure to take out required insurances. • Fraudulent or corrupt behaviour by the Private Partner. • Insolvency or bankruptcy of the Private Partner. Other events of default may be included on a project-specific basis.
IA default events	In most countries, PPP Contracts contain explicit termination rights for the Private Partner following a material contract default by the IA. Typical examples are: • Non-payment of any amounts owed by the IA to the Private Partner (e.g., capital grants or service fees). • Any actions by the IA (or obligations agreed to by the IA that are not performed) that make it unfeasible for the Private Partner to meet its obligations under the PPP Contract. • Material misrepresentation, omissions, or inaccuracy in warranties made by the IA in the PPP Contract, which results in material adverse effects on the Private Partner, the Private Partner's ability to perform its obligations or its rights under the PPP Contract.
Force majeure	Force majeure events are events that are outside the control of the parties and that significantly disrupt the project. If the event is prolonged and serious, it may give rise to a right for either party to terminate the PPP Contract. The PPP Contract should clearly define the force majeure events and the length of time they must exist (typically 6 or 12 months) before termination can occur and determine the parties' rights if it occurs. Force majeure is further discussed in Section XII (Force Majeure). Typical examples are: • Epidemic, plague, or quarantine. • Act of war (whether declared or undeclared), invasion, armed conflict or act of a foreign enemy, blockade, embargo (including

Termination grounds	Typical events for termination
	any consequential unavailability or shortage of fuel or materials), revolution, riot, insurrection, civil commotion, an act of terrorism or politically motivated sabotage or kidnapping, whether inside or outside the country. • Explosion, accident, fire, radioactive contamination or ionising radiation or chemical contamination which (in each case) is not caused by a government event or does not constitute a government event. • Earthquake, tsunami, lightning, typhoons, landslide, storm, cyclone, tornado, floods or other unusually severe weather conditions or any other act of nature.
IA termination for convenience	The Government typically reserves for itself the right to terminate the PPP Contract at any time without providing any reason. This is to ensure that a government can respond to any public interest consideration that may arise (e.g., a change in policy or circumstances, that cannot be predicted when the PPP Contract is being prepared).

3.4.3. In defining the circumstances where default can lead to termination, there are often several important factors and processes that should be considered. These are:

- The materiality of breaches that should give rise to a termination – generally, termination should only be available for serious breaches, and minor possible defaults do not usually give rise to a right to terminate.
- How to treat persistent breaches – a large number of minor breaches, each of which would not qualify as grounds for termination on its own, can be considered grounds for termination in some cases. This addresses situations where performance is systematically poor, degrading the overall value of the PPP to a government, without a single major breach. This is typically drafted as a separate event of default arising from the accumulation of a defined substantial number of deductions, performance points or warning notices over a specified period.
- Remedies – termination generally only applies to breaches that (i), because of their nature, cannot be remedied (e.g., a sale of the investor's interest to another party without consent) or (ii) have not been remedied after a reasonable 'cure' period.

3.5. Principles Governing Compensation on Termination

3.5.1. The compensation amount for the termination will depend on the reason for termination.

3.6. Because the two parties to the PPP Contract have conflicting interests over what can be a substantial sum, there is a significant potential for disputes to arise. The PPP Contract should therefore be as clear as possible regarding what each party is entitled to.

3.6.1. A summary of the general principles for compensation is set out in Table 23, noting that there can be exceptions depending on specific policy objectives and the commercial context of the PPP Project.

Table 23: Principles governing compensation for termination reason

<table>
<tr><th>Termination reason</th><th>Principle governing compensation</th></tr>
<tr><td>Private Partner default</td><td>Even if a Private Partner defaults on the PPP Contract, compensation should be paid to the Private Partner to the extent that the Private Partner has contributed value to the asset that is being transferred to the IA (less any liabilities still owed by the Private Partner to the IA).

The reason for paying compensation, even when there has been a failure on the part of the Private Partner, is to ensure that the IA does not unfairly receive a benefit from terminating the Private Partner. If compensation did not exist in this case, then IAs could have the incentive to terminate projects instead of working to resolve issues, which could negatively impact the willingness of bidders and their financiers to bid on future PPP Projects.

There are several alternative methods for determining the compensation payable to the Private Partner. The two most common approaches are:
Market value approach – compensation is determined by the PPP Contract's market value at the termination point. For example, if the IA re-tenders the PPP Contract and selects a new Private Partner to continue with the PPP Contract, then any amount paid by the new Private Partner for taking over the PPP Contract would represent value to be paid to the defaulting Private Partner. The benefit of this approach is that it reflects the current market conditions and the fair market value of the assets and liabilities. It provides a clear and objective basis for determining compensation which may minimise the risk of dispute between the parties. As a drawback, this approach is subject to market fluctuations and may not reflect the actual value of assets and liabilities, particularly if the market is not functioning efficiently.
Net present value (NPV) approach – if there is no liquid (i.e., active) market of bidders to take over the project, then the compensation may be determined by taking the NPV of the future cash flows of the PPP Contract over its remaining life, generally based on the advice of one or more expert valuers. This approach considers the time value of money, taking into account the future cash flows of the PPP, and may provide a more accurate representation of its value. It is based on the estimated future cash flows of the PPP, which may be uncertain and subject to fluctuations. The NPV calculation can be complex and requires special expertise, which can increase the cost and duration of the process.</td></tr>
</table>

Termination reason	Principle governing compensation
	The Private Partner is paid the compensation value, less any costs incurred by the IA in relation to the termination, or in returning the asset to its specified performance (unless a new buyer has agreed to take on the rectification obligations as part of its purchase). Some less common approaches that may be used are: • Book value approach – compensation is based on the net book value of the assets. This has a high risk of under- or overstating the value of the project to the IA (e.g., if the book value does not reflect the current performance of the asset). This approach is simple to calculate, as it only involves determining the assets and liabilities of the PPP and subtracting the liabilities from the assets. It provides a clear and objective basis for determining compensation. It provides a snapshot of the past performance of the PPP, reflecting the assets and liabilities as they existed at a specific point in time. In terms of drawbacks, it does not reflect current market conditions and does not consider future cash flows. • Debt approach – compensation is limited to the senior debt outstanding at the time of termination. This is a slightly more punitive approach and can result in a gain on termination to the IA, as nothing is paid for the Private Partner's equity in the project. The promise to pay debt means that the project may be bankable from a lending perspective, even if equity receives nothing on termination.[122] The debt approach focuses on the financing of the project, including any interest and other fees paid by the Private Partner. It may not accurately reflect other factors such as assets, liabilities and future cash flows, and may result in an unequal distribution of compensation.
IA default	Usually, the Private Partner receives sufficient compensation to be in the position it would have been in if the PPP Contract had run its full term. Termination payments are typically set to: • The value of debt, plus • Some compensation for the equity that has been invested, plus • Subcontractor break costs, plus • Redundancy payments for employees of the Private Partner. In most cases, the IA will decide at the bidding stage how the equity is to be compensated. The compensation amount for equity is often calculated based on: • Market value: compensation is based on the amount for which the equity could have been sold on the open market at the termination

[122] European PPP Expertise Centre, 2021, Termination and Force Majeure Provisions in PPP Contracts: Review of current European practice and guidance

Termination reason	Principle governing compensation
	date. The market valuation reflects the value of expected future cash flows of the Private Partner, including allowing for any necessary remediation in the asset due to any defects in the Project. • Base case internal rate of return (IRR): equity is valued over the remainder of the PPP Contract term following the termination date at an amount equivalent to the assumed equity return projected at the start of the project (i.e., the date of financial close. The equity investor retains any downside or upside on equity performance prior to the termination date), or • Adjusted base case IRR: like the preceding approach, equity is valued over the remainder of the term following the termination date at an amount equivalent to the assumed equity return as at the date of financial close. An adjustment is made to that value taking into account actual equity performance prior to the termination date. For example, where equity had underperformed base case IRR prior to the termination date, the difference between actual performance prior to the termination date and forecast performance as at the date of financial close would be added to the payment, such that the total compensation would increase to equate the originally forecast equity return. Similarly, where equity had outperformed base case IRR prior to termination, the total compensation value would be adjusted downward.
Force majeure	It is generally considered that the risk of force majeure should be shared to some extent between the two parties since neither party is at fault. The compensation is generally higher than that allowed for Private Partner default but lower than that for IA default. One common formula is for compensation to cover: • The outstanding debt (including any costs associated with breaking hedges and other long-term financing contracts), plus • Potentially, an amount of equity. There are several approaches to including an equity amount in the force majeure termination compensation, including: • No payment is made to equity investors (total loss). • A partial or total repayment of equity is made, excluding any return, or • Equity is repaid in total, including any return generated between the date of financial close and the date of termination. Any return is typically calculated with reference to the equity IRR assumed at the date of financial close.

Termination reason	Principle governing compensation
IA termination for convenience	• The usual approach is to treat the termination for convenience as being equivalent to an IA default event in terms of the compensation to the Private Partner. Making the compensation equal under these two types of termination avoids the possibility of a Government having unfair incentives to prefer to breach an agreement instead of terminating for convenience, or vice versa.

3.6.2. When preparing the PPP Contract termination clauses, the IA should consider:

– The preferred approach to valuing the compensation to be paid for Private Partner default (market value, NPV, book value or debt approach).

– The preferred approach to valuing the compensation to be paid for IA default and termination for convenience).

– The preferred approach to valuing the compensation to be paid for prolonged force majeure).

– The set-off rights (i.e., the ability of the IA to deduct from the compensation payment any amount the Private Partner may owe to it under the PPP Contract, including the costs of termination and any costs to return the project to its specified performance).

3.6.3. The compensation payable on termination is a key focus for the PPP Project's lenders and equity investors. Clear guidance should be provided to bidders in the bidding documentation regarding the approach adopted. Even if the PPP Contract is clearly drafted, the compensation calculation can be complex. For example, the PPP Contract usually specifies that there is to be no double-counting of value as a result of applying compensation formulas, but these issues can be subtle, depending on the circumstances. The IA should engage legal and financial experts for this process. Additionally, the Guidelines on Fiscal Management provides a detailed explanation on the calculation and application of the termination sum, ensuring transparency and consistency in the process.

4. International Best Practice

4.1. Some comparable practices related to mechanisms for compensation in the event of early termination in benchmark countries are set out in Table 24.

Table 24: Early termination compensation - comparable practices in benchmark countries

Country	Key characteristics
Private Partner default	
Australia - Partnerships Victoria[123]	For Private Partner default, the Private Partner receives compensation for the value of the project that the IA is taking back, less any liabilities that the Private Partner may have to the IA. The PPP Contract normally sets out a choice for compensation based on either:

[123] Partnerships Victoria, 2018, Availability PPP PV Standard Project Deed – Guidance Notes

Country	Key characteristics
	• The IA conducting a competitive re-tender process to obtain the highest compliant tender price for the project (where there is a liquid market), or • An independent expert opinion appointed by the parties (if there is no liquid market, or the IA elects not to conduct a competitive re-tender).[124] Neither manner of calculation protects the payment of all project debt, and there is no specific payment to equity investors as a result of Private Partner default, except to the extent the value determined exceeds the value of debt. Compensation will be distributed to project financiers in the order of their priority (e.g., senior debt, followed by mezzanine debt, followed by preferred equity, followed by common equity). If the value of the Private Partner's liabilities to the IA and the costs of rectification exceeds the value of the project, the IA will be entitled to a payment of the net difference by the Private Partner.
UK[125]	The IA agrees to pay the market value for any assets to be transferred to it, based on the remaining term of the PPP Contract before the decision to terminate. The IA may elect to either: • Determine the market value through a re-tendering process where new investors buy the unexpired term of the PPP Contract. That is, a competitive bidding process is a method for determining the value of the compensation, or • Where there is unlikely to be any appetite for participation by investors in a re-tender process, then the IA can ask an independent expert to determine an 'estimated fair value'. Where the outcome of the fair value calculation is contested, the parties can refer the determination to a dispute resolution process.
New Zealand[126]	The compensation will be equal to either: • The adjusted estimated value of the PPP Contract, or • Adjusted highest compliant tender price from a re-tender. New Zealand's template PPP Contract says that values should be adjusted for several items. These may include, for example, bidding costs, set-off amounts, insurance proceeds payable to the Private Partner but not yet paid, and rectification costs. This list is not exhaustive.

124 Partnerships Victoria, 2018, Availability PPP PV Standard Project Deed – Guidance Notes
125 HM Treasury, 2012, Standardisation of PF2 Contracts
126 New Zealand Infrastructure Commission Te Waihanga, 2013, Standard Form Public Private Partnership (PPP) Project Agreement

Country	Key characteristics
Italy[127]	Upon termination, the IA pays to the Private Partner an amount equal to: • The costs incurred for the works carried out, minus • Any public grant already paid to the Private Partner, minus • Any penalties, minus • Any direct and indirect damages (in excess of the penalties) incurred or to be incurred by the IA to remedy the Private Partner's breach, minus • Costs necessary to complete the construction of the project or, if the termination occurs during operations, to restore the project in compliance with the design and technical specifications, minus • The costs for re-tendering the project.
IA default and IA termination for convenience	
Australia - Partnerships Victoria[128]	The key components of compensation for voluntary termination by the IA are: • An amount equal to project debt, plus • A payment to equity investors, plus • Redundancy payments for Private Partner employees, plus • Subcontractor termination amounts payable under key subcontracts, plus • Amounts owing at the time of termination by the IA to Private Partner under the project documents, minus • Liabilities owing at the time of termination by the Private Partner to the IA under the project documents, plus/minus • Costs incurred or gains realised on termination of financing arrangements (including closing out of derivatives), minus • Any insurance proceeds paid to the Private Partner, amounts held in bank accounts and other amounts payable to the Private Partner by third parties.
UK[129]	The Private Partner should receive compensation which leaves it in the position it would have been in had the PPP Contract run for its full term. The compensation for a voluntary termination should be the same as the level proposed for termination for IA default. The value of

127 Herbert Smith Freehills LLP, 2022, The Public-Private Partnership Law Review: Italy
128 Partnerships Victoria, 2018, Availability PPP PV Standard Project Deed – Guidance Notes
129 HM Treasury, 2012, Standardisation of PF2 Contracts

Country	Key characteristics
	compensation cannot be less than the amount of outstanding senior debt at the termination date. The Private Partner must specify its preferred method of calculating the equity return at the time of its bid. It should choose between (i) the value set out in the original base case, (ii) the market value at the time of termination and (iii) a value reflecting the original base case return from the termination date. The formula includes components for: • The base senior debt, plus • Estimated value of equity under the preferred method above, plus • Redundancy payments for employees of the Private Partner, plus • Subcontractor breakage costs.
New Zealand[130]	The compensation should be greater of (i) the formula set out in the PPP Contract or (ii) an estimated equity value as determined by an independent expert. The formula includes components for: • The base senior debt, plus • The greater of zero and the adjusted estimated value of the equity, plus • Any redundancy payments for employees of the Private Partner under the terms of the relevant employment contracts, plus • The costs of any breakage amount under the terms of the relevant subcontractor contracts. Adjustments are made in accordance with the PPP Contract and may include, for example, set-off amounts.
Italy[131]	If the termination occurs during construction, the Private Partner will be entitled to: • An amount equal to the cost of the construction works duly performed, plus • All unpaid amounts the Private Partner is owed under the PPP Contract, plus • Penalties and extra costs incurred or to be incurred by the Private Partner due to the termination (including hedging breakage costs), plus • A loss of profit indemnity equal to 10% of the value of the works yet to be performed, less

130 New Zealand Infrastructure Commission Te Waihanga, 2013, Standard Form Public Private Partnership (PPP) Project Agreement
131 Herbert Smith Freehills LLP, 2022, The Public-Private Partnership Law Review: Italy

Country	Key characteristics
	• Any public grant received from the IA. If the termination occurs during operations, the Private Partner shall be entitled to: • An amount equal to the value of the construction works duly performed and ancillary costs, to the extent not depreciated, plus • All unpaid amounts the Private Partner is owed under the PPP Contract, plus • Penalties and extra costs incurred or to be incurred by the Private Partner due to the termination (including hedging breakage costs), and • The present value of the project service revenues until the original expiry date of the PPP Contract, less • Any public grant received from the IA.
Force majeure	
Australia - Partnerships Victoria[132]	The key components of the force majeure termination payment are: • An amount equal to project debt, plus • Amounts owing at the time of termination by the IA to the Private Partner under the project documents, minus • Liabilities owing at the time of termination by the Private Partner to the IA under the project documents, plus/minus • Costs incurred or gains realised on the termination of financing arrangements (including close out of derivatives), minus • Insurance proceeds, amounts held in bank accounts and other amounts payable to Private Partner by third parties, minus • Debt amounts that were intended to be refinanced by equity. The termination payment for force majeure includes payment of debt but no specific payment to equity investors. Equity investors lose their equity in the project if the project is terminated for force majeure.
UK[133]	The IA pays compensation to the Private Partner, reflecting a view that force majeure is neither party's fault and the consequences should be shared to some extent. Generally, compensation is the sum of: • Base senior debt, plus • Junior debt less an amount equal to the aggregate of payments of interest made by the Private Partner under the sub-financing agreements, plus

132 Department of Treasury and Finance, 2018, Availability PPP PV Standard Project Deed – Guidance Notes
133 HM Treasury, 2012, Standardisation of PF2 Contracts

Country	Key characteristics
	• The share capital amount of the Private Partner less dividends or distributions paid, plus • Redundancy payments, plus • Subcontractor breakage costs. This approach means the Private Partner's equity investment is repaid, but they receive no return on investment.
New Zealand[134]	Where termination occurs before the service commencement date, compensation should total: • Base senior debt, plus • The adjusted fully paid equity, and Where termination occurs on or after the service commencement date, an amount equal to the greater of the: • Adjusted estimated value of the PPP Contract, or • Base senior debt. Adjustments are made in accordance with the PPP Contract and may include, for example, bidding costs, set-off amounts, insurance proceeds payable to the Private Partner but not yet paid and rectification costs.
Italy[135]	If the termination occurs during construction, the Private Partner will be entitled to: • Costs of the construction works duly performed, plus • Penalties and extra costs incurred or to be incurred by the Private Partner due to the termination (excluding hedging breakage costs), less • Any public grant received from the IA. If the termination occurs during operation, the Private Partner will be entitled to: • The value of the works duly performed and ancillary costs, to the extent not depreciated, plus • Penalties and extra costs incurred or to be incurred by the Private Partner due to the termination (excluding hedging breakage costs), less • Any public grant received from the IA.

4.2.

[134] New Zealand Infrastructure Commission Te Waihanga, 2013, Standard Form Public Private Partnership (PPP) Project Agreement
[135] Herbert Smith Freehills LLP, 2022, The Public-Private Partnership Law Review: Italy

4.3. Case Study 23 and Case Study 24 showcase the financial implications of termination.

Case Study 23: Sports Hub PPP[136]

- In August 2010, the Singapore Government entered into a PPP Contract with the Private Partner (SportsHub Pte Ltd) to design, build, finance and operate the Singapore Sports Hub over a 25-year period.
- The Private Partner took on the upfront financing costs and risk for the construction of the Sports Hub. In return, the Singapore Government would pay an annual fee from 2014 until the end of the concession term in 2035 to cover the operating and financing costs.
- Sports Hub commenced full operations in 2014.
- The terms of the PPP Contract gave the Singapore Government the right to terminate the PPP Contract for convenience. In June 2022, the Singapore Government exercised this right and took ownership and management of the Sports Hub in December 2022.
- Upon termination, the Singapore Government will pay the Private Partner a sum assessed in accordance with the PPP Contract comprising:
  - The amount of the outstanding loan that was taken in respect of the construction of the Sports Hub. This is an expenditure that the Private Partner would have incurred had it financed the Sports Hub from the start, without the PPP.
  - A fair, open market value of the equity in Sports Hub.

The compensation paid for terminating the PPP arrangement and taking over the operations of the Sports Hub is estimated to be comparable to the cost of continuing with the PPP arrangement until 2035.

Case Study 24: Sydney Metro[137]

- The Victorian Government tendered for the delivery of the eastern section of an 18-kilometre cross-city road (East West Link – EWL) as a PPP in 2014. A consortium called East West Connect (EWC) was awarded the Contract to design, construct, finance, operate and maintain the road in October 2014 after a competitive process.
- Following the November 2014 election, a newly elected Government suspended work on the project. An agreement was reached with EWC in June 2015 to terminate the project.
- The cost of termination for the Victorian Government was more than AUD 1.1 billion, for little tangible benefit given that the project had only recently been awarded. This cost included expenditure on the project's planning, development, procurement and termination.
- It was expected that the government would be able to offset part of this cost via a sale of properties acquired for the project, worth around AUD 320 million.

[136] Sport Singapore, 2022, Sport Singapore takes over the Singapore Sports Hub to unlock full potential for Singapore
[137] Victorian Auditor General Office, 2015, East West Link Project

- The Victorian Auditor-General's Office (VAGO) found that the decision to terminate was made without fully considering the merits of continuing with the project. The failure to properly assess the benefits of termination against updated costs and benefits of continuing the project meant that the government was deprived of comprehensive advice on whether termination was the best use of public funds.
- However, VAGO found that the amount payable by the previous Government under the termination settlement negotiated by the new Government with EWC was substantially lower than the cost of termination under the PPP Contract.

5. Guiding Principles

5.1. PPP Contracts should set out the circumstances and compensation payable for the three major types of termination: termination for Private Partner default, termination for IA default (including termination for convenience) and termination for force majeure. The compensation amount for the termination will depend on the type of termination.

5.2. When preparing the termination provisions in contracts, consideration should be given to fairness, incentives for the Private Partner and its lenders, the IA's incentives (from the perspective of bidders) and bankability.

5.3. The actual decision to terminate is extremely serious and should only be contemplated as a last resort after the IA has made a sincere, diligent effort to resolve the situation by other means in cooperation with the Private Partner. Termination can have severe financial and non-financial implications for both parties, including reputational damage, and the Government's decision to terminate can potentially influence the market's interest in future projects.

5.4. IAs should consult closely with MEF at the earliest opportunity regarding any situations or decisions that could lead to termination and should seek external legal and financial advice.

XVII. ASSET HANDBACK

1. Overview

1.1. Asset handback addresses the terms on which the project assets will be transferred back to the IA following the completion of the PPP Contract. It should be noted that not every PPP necessarily involves a transfer of assets back to the government at the completion of the PPP Contract (in which case there is no need to consider handback), although this is less common.

1.2. If assets are handed back to the IA at the completion of the PPP Contract, this should be considered early in procurement as the design of the solution will impact the handback specifications and/or requirements. An asset handback plan will typically document these specifications and requirements, following the completion of contract close and as part of the finalisation of the asset solution.

2. Handback Plan

2.1. Both the IA and the Private Party will need to contribute to the development of the handback plan, however, the responsibility for drafting and finalising the detailed plan usually rests with the Private Party. The final detailed handback plan shall be approved by the CMC.

2.2. An asset handback plan will typically include:

- The number, timing and sequencing of handback across the PPP lifecycle.
- The scope of each handback (i.e., what will be transferred).
- The type of asset information to be included in the handback.
- The description of any activities required to be undertaken by the parties before handback (e.g., training).
- The roles and responsibilities of the parties during handbacks.
- The details of required notifications (e.g., agreed timeframes, information).
- The description of requirements for operational readiness following handbacks.

2.3. The specific details of a given asset handback plan will depend on the general nature, complexity, risk and cost of the project, along with other matters, such as the effects on other infrastructure, consumers, the community, and any other stakeholders.

2.4. Clear negotiation of the handback is particularly important as the Private Partner is unlikely to accept any additional obligations at the end of the PPP Contract that are not already agreed. The PPP Contract should set out specific details regarding asset conditions and cooperation obligations, including:

- The right of the IA and its personnel to take over and use the asset at the end of the PPP Contract or early termination.
- The expected condition of the project assets by the IA.
- The process for handback and the time for orderly transition from the Private Partner to the IA or third-party appointed by the IA.
- The role, rights and responsibilities of any IC employed to monitor and/or manage the asset handback process.

3. Specifying the Asset Condition on Handback

3.1. The IA should ensure that the PPP Contract sets out the Private Partner's obligations in regard to asset condition on returning it. Condition specifications for handback are defined during Phase IV: PPP Procurement and Contracting in the PPP lifecycle.

3.2. Desired handback conditions typically depend on the:

- IA's intentions with regard to post-PPP usage.
- Nature of the asset (e.g., roads and buildings are usable for much longer than the typical PPP Contract term).
- Stage at which the PPP Contract comes to an end (i.e., whether termination occurs during construction or operation or on natural expiry).

3.3. The specific considerations informing the IA's requirements for handback will differ from project to project. For example, if a PPP Contract has a lengthy operating period, a requirement for the Private Partner to replace a major component (e.g., a roof or major plant and equipment), shortly before the end of the contract term could result in a higher priced bid compared to one where the replacement occurs after the handback. The IA should evaluate whether incorporating such capital expenditure into the PPP Contract represents value for money, particularly as technological advancements may lead to more cost-effective or efficient solutions becoming available by the time the contract concludes.

3.4. Maintenance standards tend to increase over time, particularly in response to regulatory changes as well as the introduction of new technologies (e.g., renewable energy assets), which may be more expensive than established technologies. Where there is uncertainty in the costs and standards that may apply to project assets, more consideration should be given to the potential costs of defining the standard of condition of the returned assets, taking into account the future plans for the assets after termination and the impacts on the costs of the Project. A common approach is to require the asset to be handed back consistent with the regulatory standards prevailing at the time of handback, although this may be considered a risk by some bidders.

3.5. On the other hand, some assets (e.g., rail sleepers) are unlikely to see major regulatory or technologically driven changes to maintenance standards, and the specification of the handback standard should be relatively straightforward.

4. Handback Provisions Drafting in the PPP Contract

4.1. The PPP Contract will set out the requirements for the nature and condition of the assets upon termination. These typically include:

- A description of the assets for handback, including details on condition and safety and operational arrangements in place at the point of handback.
- An official statement to say the Private Partner has determined the assets can be handed back.
- The provision of maintenance manuals, financial information, relevant certifications, and any other necessary asset-related information has been provided to the IA.

- Clarifications on any matters that the Private Party is continuing to manage – these might include outstanding or delayed maintenance requirements or risk-related activity.
- Clarifications on any matters that the IA will need to take carriage of.

4.2. An IC is appointed to independently oversee the implementation, operations and maintenance of the project facilities and assets. The IC will be involved in drafting the handback provisions in the PPP Contract. Typically, an IA will select the IC in consultation with the Private Partner, generally within 30 days of the Financial Close. In most cases, the IC costs are financed jointly by the IA and Private Partner. For more details regarding the IC and associated engagement process, see Section VI (Independent Consultant).

5. Maintenance Obligations During the PPP Contract

5.1. Maintenance plays a key role in relation to handback:

- Maintenance decisions are often long-term and can affect the handback condition long before the formal handback process commences.
- There is the possibility of early termination due to the default of one party, force majeure or other provisions of the PPP Contract.

5.2. Maintenance obligations on the Private Partner should:

- Support the delivery of the intended level of service required under the PPP.
- Ensure that the asset will achieve its intended design life.
- Keep the asset in good order consistent with the hand back requirements.

5.3. The maintenance requirements generally cover heavy and light maintenance requirements:

- Heavy maintenance requirements include all major maintenance, and are specified through planned maintenance schedules, a protocol for unplanned maintenance, and a program for replacing key assets (known as 'lifecycle assets') in accordance with the intended design life.
- Light maintenance requirements include cleaning, replacement of minor spares and other less significant maintenance services. In some PPP Contracts, light maintenance is not covered in detail, particularly if the Private Partner has an incentive to undertake these services because failing to do so could adversely affect revenues.

5.4. Appropriate consequences should be defined for failing to meet maintenance obligations (e.g., abatements to availability payments).

5.5. Some PPP Contracts specify the creation and operation of a maintenance reserve account. This requires the Private Party to make payments on a regular basis to ensure that any maintenance activity can be covered. For example, the Zaragoza Tramway project in Spain required the Private Party to pay 5% of its availability payments into a reserve account to pay for any spending required to meet handback requirements.[138]

[138] Global Infrastructure Hub, 2023, Zaragoza Tramway.

6. Survey of the Condition of the Asset

6.1. The IA should ensure that the PPP Contract provides for a termination survey, which is developed either jointly by the IA and the Private Partner, or by an IC agreed upon by the parties.

6.2. The termination survey should be designed to determine whether the obligations are likely to be met and what remediation works may be needed. The survey should take place sufficiently in advance of the PPP Contract expiry date to allow for any remediation to be carried out and verified. In some jurisdictions (such as in some Australian states, the Netherlands and Belgium), successive termination surveys before expiry are recommended to ensure that asset condition is regularly monitored.

6.3. Other elements of the survey that should be considered include:

- The cost of the survey to each party.
- A mechanism for recovering from the Private Partner the cost of any remediation works needed to bring the asset up to the required condition.
- A follow-up survey to confirm that the remediation has been satisfactorily implemented.

6.4. The IC and CMC will both be involved in assessing and certifying that the Project assets and facilities are in good working condition and meet with all the standards and specifications stipulated in the PPP Contract. Article 43 of the Law on PPPs also states that the PPP Contract will specify not only the conditions of the asset(s), but also the procedures for handback. It is important that a contingency fund for any maintenance requirements is established in the event that the termination survey indicates that the asset has not been maintained to an adequate standard.

7. Related Project Agreements

7.1. Asset handback details and requirements defined in the PPP Contract will have an impact on related project agreements (e.g., financier deeds, access agreements, IC). For instance, the Private Partner's sub-contractors should be obliged to carry out relevant condition surveys and rectification and provide relevant cooperation and assistance (including ensuring any unexpired equipment warranties or guarantees related to the PPP Project which can be transferred to the IA or its nominee). The PPP Contract and related contracts should also align to health and safety, land use, environmental and other relevant regulatory requirements.

8. Risk Management

8.1. The PMU needs to monitor and manage a number of risks related to asset handback.

8.2. In addition to the risks highlighted in the SOPs, the PMU should ensure it monitors:

- Safety risk: the risk that the state or quality of the asset or land at the time of handback poses safety or hazard concerns to asset users or any maintenance and repair workers.
- Reputational risk: the risk to government's reputation in the community where it is handed back an underperforming or inadequately managed asset, particularly if due to early contract termination for breach of performance standards.

8.3. Some risk mitigation strategies that should be considered for the aforementioned risks include:

- Regular monitoring of the project by the IC and the CMC (e.g., monthly, quarterly), for any asset deterioration, in order to ensure early identification and rectification.
- Establishment of a contingency fund for any unforeseen maintenance requirements upon handback so that there is minimal delay or disruption to service delivery or rectification works.
- Consideration of the local climate and environmental factors that would degrade the asset quality or disrupt service delivery (e.g., soil conditions, climactic factors affecting asset deterioration such as humidity or salinity, and the frequency and intensity of natural hazards such as, flooding, fire and landslips or earthquakes) in the development of overall project design, operation and maintenance protocols.

8.4. Particularly for projects located in remote or rural Cambodian areas, accessibility to site for inspection, operations, maintenance and rectification works should be considered. The rainy season in particular may heighten the likelihood of certain incidents, such as flooding or landslip, and may similarly preclude access to perform restoration or assess damage. In designing a handback plan, and in developing an approach to design, construction, operation and maintenance of project assets more broadly, allowing for redundancy in capacity and/or accessibility should be considered.

8.5. Table 25 outlines key risks associated with asset handback as detailed in the SOP for PPP Projects Volume II: Guidelines – Guidelines on Contract Management, however, there are likely to be additional risks depending on the project and asset. The PMU should develop specific mitigation strategies for each during the planning phase of the project.

Table 25: Key risks associated with asset handback

Risk	Description
Project condition risk	Project condition risk is the risk that the project facilities do not meet the prescribed condition at the end of the contract period. This may necessitate the pursuit of a claim against the Private Partner, which may cause delay or disruption to service delivery.
Service disruption risk	Service disruption risk is the risk that the service to the users is disrupted while the handback is in progress.
Retendering risk	Retendering risk is the risk of an unexpected asset handback, where the asset may not have been maintained adequately by the Private Partner, and, therefore, will cost the IA to improve asset quality.

8.6. Case Study 25 highlights the importance of undertaking prior planning for the handback process.

Case study 25: M4 Tollway – New South Wales, Australia[139]

- The M4 Tollway was one of the first PPPs in NSW and the first Australian road concession that reached the intended handback point. The project was designed to connect two separate sections of motorway and undertake some improvements to the existing infrastructure. The connective section and these improvements were constructed through a 20-year Design-Build-Finance-Operate-Maintain (DBFOM) toll concession. The IA was the NSW Roads and Traffic Authority (RTA).
- As the PPP neared its expiration, it was discovered that the original project deed between RTA the Private Partner did not include a specific handback provision. Items missing from the project deed included:
  - Specifications relating to the condition of the roadway for handback.
  - Detail regarding how to determine repairs needed upon handback.
  - Provisions for covering repair costs.
  - Detail relating to how maintenance requirements would need to change with evolving standards.
- The parties established a handback governance group to guide the handback process. This governance group defined all quality and standard requirements of handback, given there were no specifications in the project deed.
- A later report by the Auditor-General of NSW found that the roadway was in satisfactory condition upon handback, but this was due to good management and the goodwill of the parties rather than the PPP Contract. The Auditor-General suggested that future project deeds include appropriate and detailed specifications regarding asset handback.[140]

9. International Best Practice

9.1. Some comparable practices of how asset handback operates in benchmark countries are set out in Table 26.

Table 26: Asset handback - comparable practices in benchmark countries

Country	Key characteristics
Australia	• It is standard practice in Australia for the equivalent of the IA to engage with an IC to monitor asset condition at regular intervals throughout the PPP to ensure the asset will be in an appropriate condition at asset handback. This allows for rectification orders to be issued during the term of the concession in a timely manner (i.e., well before contract expiry). • In some Australian States, successive termination surveys before expiry are recommended to ensure that asset condition is closely monitored on

[139] U.S. Department of Transportation, 2017, Case Studies of Handback Experience with Public-Private Partnerships.

[140] New South Wales Auditor-General, 2009, Auditor-General's Report – Performance Audit: Handback of the M4 Tollway.

Country	Key characteristics
	a regular basis (e.g., two years, one year and six months before expiry, and again on expiry).
UK	• Some early PFI / PPP Contracts in the UK did not specify the required condition of the assets, or any planning for handback. • The most recent standard form contracts and guidance recognise the importance of prescribing detailed handback requirements and making provision for lead-in processes to be followed when a project approaches the end of its term. • A report by the National Audit Office made a number of observations regarding handback, including:[141] – Handback can be a highly resource-intensive process for the IA. – Clear specifications around handback (including the IA's rights to information) are important, as ambiguity can increase the scope for disputes. – The parties often have divergent interests when contracts expire (which also increases the risk of disputes). – Preparations and planning should start early to mitigate the risk of service disruptions, manage costs and allow time to address any disputes.
France[142]	• Asset handback processes are often overseen by a third-party auditor, who is appointed by the IA. The auditor is responsible for verifying that the assets have been constructed, maintained and operated in accordance with the contract specifications and quality standards, and that they are handed back in an acceptable condition. • French law requires that the assets be transferred at no cost to the IA, except in cases where the IA agrees to pay a fee for the transfer. • The Private Partner is required to provide a performance guarantee or warranty for the assets for specified period after handback. This is intended to ensure that the IA is not left with any unexpected maintenance or repair costs. • Public land is subject to certain restrictions and protections that limit the ability of private individuals or entities to acquire or dispose of it. Firstly, public land is generally not sold to Private Partners, rather, the land is leased or granted for specific uses or periods. Secondly, public land is protected from seizure by a tribunal or other legal action, meaning that even if the IA is sued or faces legal actions, its public land cannot be seized as a form of compensation or payment. Thirdly, public land is generally not subject to the statute of limitations on claims against it, which means that the IA can reclaim it at any time if it has been taken or used unlawfully by a Private Partner.

141 National Audit Office (UK), 2020, Managing PFI assets and services as contracts end
142 Francois Bergere, 2016, Ten Years of PPP: An initial assessment.

10. Guiding Principles

10.1. Planning for the handback of assets should occur as part of the planning for the procurement of the PPP. Specifications and requirements for asset handback should be included in the project deed. These requirements need to consider that handback could potentially be decades away but must also allow for the possibility of early termination.

10.2. The extent of the planning will vary depending on the size of the project. Project design, complexity, risk, cost, impacts on other infrastructure, consumers, community, and any other stakeholders should be factored into planning decisions and, ultimately, what requirements are specified in the project deed.

10.3. Planning for handback increases the likelihood that the IA will receive the asset back in a suitable condition, and failing to adequately define the Private Partner's handback obligations can significantly undermine the VfM proposition of a PPP.

10.4. The standards for handback should consider carefully the VfM implications. For example, requiring an arbitrarily high standard of quality of the returned assets may or may not represent VfM, depending on the case, if that requirement will increase considerably the costs of the project.

10.5. The handback process, including surveying the condition of the assets, should commence several years prior to the expected expiration of the PPP. This ensures there is enough lead time for the Private Party to rectify issues relating to the condition of the asset.

10.6. Consideration should be given to requiring the Private Partner to reserve amounts to address any handback responsibilities during the PPP Contract term. The size of the reserves should reflect a reasonable assessment of the costs and risks involved for the particular project. Reserve requirements do not generally have to start with the commencement of operations but should not be left so late that they do not provide a sufficient incentive for the Private Partner to meet its maintenance obligations.

XVIII. FINANCIAL MODEL

1. Overview

1.1. A financial model is an analytical tool that allows users to assess the financial feasibility of a project by representing expected cash flows and returns. The financial model plays a key role in a number of important processes, starting with whether a project is viable on a standalone basis or requires government support.

1.2. For solicited proposals, a financial model is prepared by the TA in consultation with the IA. For unsolicited proposals, the Private Partner would prepare the financial model as part of their obligation to undertake the project preparation. In this case, the IA and GDPPP will still need to review the Private Partner's model in detail, and may require the assistance of a TA to do so.

1.3. The key components of a financial model are:

- Assumptions (i.e., the hardwired inputs entered into the model to represent operational data, revenues, operational and capital expenditures, financing costs, depreciation rates and so on).
- Calculations, which take the assumptions and process them into cash flows and balances.
- Project financial statements, including statements of cash flow, financial position and financial performance (i.e., the profit and loss (P&L) or income statement).
- Modelling of the financing structure, including debt (subordinate and senior debt) and equity.
- Financing/credit metrics (e.g., interest cover ratios) to assess the feasibility of the proposed financing plan and the bankability of the project from a modelling perspective.
- Equity of return metrics (e.g., equity internal rate of return (EIRR), financial internal rate of return (FIRR), and debt service coverage ratio (DSCR)) to assess the suitability and attractiveness of the project from the perspective of equity investors.
- Calculations to investigate the impact of government guarantees and government support on the financial viability of the Project.
- Sensitivity and scenario analysis to analyse the robustness of the financial forecasts to changes in key assumptions. The model is, therefore, of interest to equity investors, lenders and the IA, both in terms of what it says but also whether it has been prepared to appropriate standards of accuracy and diligence.

1.4. The model is, therefore, of interest to equity investors, lenders and the IA, both in terms of what it says but also whether it has been prepared to appropriate standards of accuracy and diligence.

1.5. The model assumptions will reflect the project structure, prevailing laws and regulations, technical and market studies, market soundings with the lenders and other project counterparties (e.g., sub-contractors). The general model structure is more common from model to model but will still be customised to reflect the project structure, capital/financing structure, payment flows, and key issues of interest to the parties, and different Private Partners can be expected to have different layouts and drafting styles in their models.

1.6. The SOPs provide some guidance on minimum requirements for bidder financial models.[143]

2. Financial Modelling During the Project Preparation Phase

2.1. Solicited Proposals

2.1.1. A financial model will be developed by the TA during the project preparation stage (i.e., prior to taking the procurement to market). This model is used to:

- Evaluate the project's feasibility (both from the perspective of the IA's interests and the deliverability of the Project by the market).
- Help assess the project's suitability for procurement under a PPP.
- Analyse miscellaneous issues that may arise during project development (e.g., commercial structuring considerations, amounts to be guaranteed, etc.).
- Assess required levels of any government support under various structuring alternatives (e.g., periodic service payments, lump sum payments, etc.).
- Inform the IA's risk analysis.
- Evaluate whether bids offer value for money on a quantitative basis, using the financial model as the Public Service Comparator (PSC).

2.1.2. This model may pass through various versions as assumptions are updated and developed. This model is used for internal IA purposes only and will not be disclosed.

2.1.3. The TA normally works closely with the IA and any other technical consultants involved to develop the model, keeping the IA informed about the progress of the model development and the key results as they become available. It is important for IAs to understand that model outputs can potentially change significantly as the model develops, and it is important not to commit to a working scenario (e.g., by circulating results to key stakeholders) until the work on the assumptions is mature and results are reasonably stable.

2.1.4. Given the importance of the financial model, some countries have issued detailed guidance for the preparation of robust financial estimates for large infrastructure projects. Examples include:

- Cost Estimating Guidance – Infrastructure and Projects Authority (UK).[144]
- Transport Analysis Guidance – Department of Transport (UK).[145]
- Tools and Techniques – Australian Transport Assessment and Planning (Australia).[146]
- Base Cost Estimation – Department of Infrastructure and Regional Development (Australia).[147]

2.2. Unsolicited proposals

143 Government of the Kingdom of Cambodia, 2022, SOP for PPP Projects, Volume III: Procurement Manual Annexures (Annex FP-2 Financial Model)
144 Infrastructure and Projects Authority, 2021, Cost Estimating Guidance
145 Department of Transport, 2013, Transport Analysis Guidance
146 Australian Transport Assessment and Planning, Tools and Techniques
147 Department of Infrastructure and Regional Development, 2017, Base Cost Estimation

2.2.1. The Private Partner prepares the financial model and undertakes many of the other project preparation tasks that, in the case of solicited proposals, would be the responsibility of the IA. Although the IA is not responsible for the model's development, it should still be deeply engaged in analysing, reviewing and challenging the Private Partner's model to determine if it is reasonable in terms of quality of analysis, depth of information, the evidence base for the assumptions and accuracy.

2.2.2. It is reasonably common for the IA to prepare modelling analysis (i.e., not a full model) to support the detailed consideration of various aspects of the project. In some cases, this may require the support of a TA.

2.3. Practical Implementation

2.3.1. Financial modelling is a complex area, and many rules require intelligent consideration to determine their applicability in any given context. For example, contracts that only involve operations and maintenance obligations and do not have any material capital at risk will not generate meaningful IRRs, as there is no significant initial cash outflow that would be needed for an IRR calculation. Even if some modest equipment purchases are required, any IRRs calculated would still likely need careful interpretation as the relationship of capital invested to cash flow may not be similar across different proposals. It may be more suitable in these circumstances to rely primarily on the net present cost of the service to a government as the main financial metric, and to benchmark margins to analyse profitability and sustainability.

2.3.2. More generally, it is important that models focus on material issues and be as simple as possible, but no simpler. It is possible to build models that are exceptionally large and detailed, or that are very complex in their approach to calculation, but these are not necessarily better than more straightforward models that focus on the best evidence-based assumptions for all material assumptions and that proceed in a clear and logical fashion.

2.3.3. Adaptations of the required approach to financial modelling set out in these guidelines should be limited and only to the extent necessary. Nothing in this subsection should be taken as advocating for over-simplification, lack of reasonable attention to detail, or lack of appropriate efforts in putting forward the best financial model that is reasonably possible in the circumstances. IAs should consult with GDPPP on any necessary issues they encounter in implementing these guidelines.

3. Finalisation of the Base Case Financial Model (BCFM)

3.1. The contractual BCFM is the version of the financial model that is agreed by the parties at financial close as the basis for the project (i.e., it is a specific version of the financial model file set as the agreed main 'base case' scenario agreed by the parties).[148] The PPP Contract normally specifies that the BCFM must be used in calculating various matters, including the impact of contractual variations, the impact of delay, and the gains from any future refinancing.

3.2. Solicited Proposals

[148] Many PPP Contracts note the 'hashed' value of the file, i.e., a serial number calculated from the file contents that can be used to prove that the file has not been altered without the parties' agreement.

3.2.1. According to the SOP for PPP Project Volume II: Guidelines on Contract Management, and SOP for PPP Projects Prakas: Guidelines on Feasibility Study; and Guidelines on Financial Analysis; the process of developing the BCFM for a Project usually aligns with the following steps:

3.2.1.1. **Project preparation**: Development of the IA's model per Section 2 (Financial Modelling During the Project Preparation Phase).

3.2.1.2. **Procurement:** Private bidders each prepare and submit a financial model with their proposals. This fully structured financial model sets out all of the matters in Section Overview, as may be appropriate to the case. In order to facilitate comparisons across the bidders, they may be required to include a pro forma schedule in a standard structure and format that presents outputs from their model consistently. Some adjustments may be made to the bidder's financial models to ensure that they are evaluated on a comparable basis.

3.2.1.3. **Award of PPP Contract**: Once the project is awarded, the winning bidder's model is updated for any changes permitted under the bidding process (e.g., permitted movements in costs to reflect the period between the submission of bids and contractual close) or specific changes agreed by the parties during negotiations.

3.2.1.4. **Financial close**: The model is normally updated again for matters requiring up-to-date data, typically interest rates and currency rates, which will flow into consequential changes across much of the financial model, including (e.g., payments from the IA to the Private Partner). This model is then attached to the PPP Contract as the BCFM at financial close.

3.3. Unsolicited Proposals

3.3.1. Once the IA has completed its review of the Private Partner's financial model and determined that it is acceptable, and the parties have agreed on the base case for the project as set out in the financial model, the model is adopted as the BCFM.

3.3.2. Because the project is analysed using the Private Partner's financial model, the IA typically does not build its own model. This can complicate the analysis of value for money as the IA does not have a model that can serve as a public service comparator. Solutions include building a model specifically for the purposes of making a VfM comparison, seeking advice from an independent third-party expert, and/or various options for benchmarking the cost of similar projects. These solutions generally do not offer the same rigour as the process followed by solicited projects.

4. Use of the BCFM

4.1. During the contract term, the BCFM may be used for a number of purposes:

- Calculating the financial impact of a variation event as per the terms of the PPP Contract.
- Calibrating adjustments to service payments or user fees, government support payments, or other payments for compensation events.
- Calculating the gains from any refinancing that may occur.
- Updating the service payments to reflect other changes (e.g., a permanent reduction in the performance of the project, relative to the contract specification).

- Other events as may be agreed between the IA and the Private Partner in the PPP Contract. These can be highly tailored to the circumstances (e.g., if the IA exercises an option agreed by the parties to expand the scope of the project).

4.2. Where payments to the Private Partner need to be adjusted to offset the impact of a given event, the model is usually re-solved for the level of payment that leaves the equity IRR unchanged, and that avoids any breach of the Private Partner's covenants with its lenders.

4.3. Outside of events specified in the PPP Contract, the BCFM is generally not updated. The concept is that the BCFM is a contractual tool that reflects the risk allocation and the terms of the PPP Contract and is not necessarily intended to reflect the Private Partner's current expectations for the project. For example, the BCFM is generally not updated for the realised outturn cost of construction, as that is a risk borne by the Private Partner that the IA can and should ignore. The Private Partner will maintain their own private modelling that they will keep updated for their purposes.

4.4. A further implication is that the BCFM is not necessarily suitable for all potential purposes under the PPP Contract. For example, under various scenarios of termination, the PPP Contract may specify that the terminated party should submit evidence of its claims for termination payments based on actual results and/or recent projections rather than using the BCFM.

4.5. The general rationale for the distinction is that, if the parties want to preserve the original risk allocation in conducting the financial analysis of the project or update the risk allocation for something that they agree should be reflected, they should refer to the BCFM. In other cases, the original risk allocation may be assessed to be less relevant than the actual facts that have emerged, in which case the BCFM should not be used.

4.6. Different countries have taken various approaches to specifying the types of changes that should use the financial model and result in the model being updated (see Section 6 (International Best Practice)), suggesting that there are few certain rules. Overall, this is a complex area and the best approach will depend on the specific circumstances of the Project and the negotiating positions of the parties. Commercial and legal advice should be closely considered in drafting the relevant provisions of the PPP Contract.

5. Auditing of the Financial Model

5.1. According to the SOP for PPP Projects Volume II: Guidelines on Contract Management, Financial Close is achieved when the SPC has entered into and executed loan/financing agreements with the lenders. It may also include a requirement for an independent auditor to provide an audit and opinion regarding the suitability of the BCFM or an updated Financial Model which incorporates agreed amendments.

6. International Best Practice

6.1. Some comparable practices for the financial model in benchmark countries are set out in Table 27.

Table 27: Financial model - comparable practices in benchmark countries

<table>
<tr><th>Country</th><th>Key characteristics</th></tr>
<tr><td>Australia (Federal)</td><td>

The National PPP Guidelines recognise the use of the financial model to recalculate service payments by government at the time of financial close.[149,150]
In some jurisdictions, the BCFM shall be updated only upon the occurrence of the following events:

Modifications.
Key risk events outside the control of the Private Partner.
Refinancing.
Compensable and negative compensable enhancements.
Any other event agreed between the partners.

In calculating impacts on payments to the Private Partner, the minimum debt coverage ratios and equity return are maintained to ensure the financial viability and stability of the project.
The Government has the right to appoint an independent expert to review the changes. Once the revision is agreed, the Private Partner shall also submit an audit certificate for the updated BCFM.
The Private Partner is also required to provide an updated financial model at least annually.
</td></tr>
<tr><td>Australia (Victoria)</td><td>

Partnerships Victoria's RFP Template provides that the bidders must provide supporting data underpinning the financial model assumptions (e.g., inflation and interest rates).[151]
The financial model is updated at the time of financial close and approved by the IA.[152]
The guidance also provides that the BCFM is typically used to:

Calculate the financial impact of variation events.
Estimate revenue sharing in case of demand risk-sharing arrangements (e.g., user-pays revenue in a toll road project).
Calculate refinancing gains or losses.

As per the standard project contract for availability PPP, the BCFM shall be updated upon the occurrence of:[153]

A refinancing event.

</td></tr>
</table>

149 Infrastructure Australia, 2015, National Public Private Partnership Guidelines: Volume 2 Practitioners Guide
150 Infrastructure Australia, 2011, National Public Private Partnership Guidelines Volume 7: Commercial Principles for Economic Infrastructure
151 Partnerships Victoria, 2016, Request for Proposal - Volume 1 - Part A – template
152 Partnerships Victoria, 2018, Contract Management Guidance
153 Partnerships Victoria, 2018, Availability PPP PV Standard Project Deed - Guidance Notes

Country	Key characteristics
	– A permanent adjustment to the service payment (e.g., as part of a reviewable services process). – An augmentation, or – Other events agreed between the IA and the Private Partner. • The contract management team have to consult the Department of Treasury and Finance for any other changes that require an update to the BCFM, including extensions or delays in the project. • The PPP Contract sets out review procedures for any updates to the financial model. The review procedures allow the IA to reject a revision to the BCFM where government considers the proposed updated BCFM is incorrect or would have unintended consequences on the project. • The contract manager is required to institute quality assurance processes such as version controls to ensure updates to the financial model are correctly recorded.
UK	• The financial model is finalised at financial close based on the economics of the project at the time. • The financial impact of changes to the scope of services provided by the project should be addressed either: – By making changes to the BCFM and re-solving for the Private Partner's IRR (while keeping the debt covenants intact), or – By pre-pricing anticipated future changes prior to financial close (by negotiating the estimated costs of the change and the impact on the service charge) so that the model will not need to be re-solved to calculate the service charge impact. • The model will be updated to reflect changes to the scope of services, either each time they occur (for significant changes) or once or twice a year (to collect small changes and reduce the labour involved in agreeing the financial model).[154] • For refinancings, the financial model and the proposed model with updated financing assumptions should be submitted to the IA. The IA has the right to audit the refinancing model at any time before or after the completion of the refinancing.
India	• The PPP Guide for Practitioners provides overall principles of financial feasibility assessment and development of the financial model.[155]

[154] HM Treasury, 2012, Standardisation of PF2 Contracts Draft (UK Government has announced that it will no longer use PF2 for new government projects. However, existing PFI and PF2 contracts will not end because of this announcement)

[155] Ministry of Finance, 2016, Government of India PPP Guide for Practitioners

Country	Key characteristics
	• Under the model concession agreement (for the user-fee PPP model), the Private Partner shall provide an updated financial model to the IA at the time of financial close that is acceptable to the lenders.[156] • The PPP Contract sets out a pre-agreed methodology to compute financial payments or adjustments to the concession period for events, such as change of scope, variations in traffic (actual average traffic vs. target traffic), force majeure events, etc. • The financial model shall be used for calculating compensation in the event of a material breach or default of the PPP Contract by the IA. • The PPP Contract allows for adjustments in the BCFM in the event of a change in the law such that the net present value of the project's net cash flow is restored to the same level as before.
South Korea	• Korea has developed a standardised template for the build transfer operate (BTO) financial model.[157] • As per the draft standard concession agreement (user-pay PPP model), the financial model shall be revised if there is a refinancing event. The revised financial model should reflect the historical cash flow and the cash flow based on revised estimates of future prices. This should be used to calculate refinancing gains.[158] • Apart from periodic adjustments for the Consumer Price Index (CPI), the user fees may be adjusted due to a force majeure event, a fault of the IA or significantly higher or lower changes in project cost. • The PPP Contract provides that the Private Partner and the IA shall reach an agreement on the necessary adjustment to user fees. Detailed guidance on the tool or methodology to compute the adjustment is not provided. • The PPP Contract does not provide any guidance on the use and revisions to the financial model other than for refinancing events.

7. Guiding Principles

7.1. Contract Preparation Guidelines

7.1.1. The RFP document should provide detailed guidance on submitting financial models, including format, model structure, currency, data sources and financial pro forma schedules to be completed by bidders to ensure high-quality proposals that are easier to evaluate. The minimum requirements set out in Annex FP-2 Financial Model will be enhanced as needed for the particular project.

[156] NITI Aayog, 2020, Public Private Partnership in Operation and Maintenance of Passenger Ropeways MODEL CONCESSION AGREEMENT (DRAFT)
[157] Korea Development Institute, 2007, Summary of Study on Standard Financial Model for Public-Private Partnership Projects
[158] Public and Private Infrastructure Investment Management Center, 2010, Draft Standard Concession Agreement for Build-Transfer-Operate Projects

7.1.2. Bid models should be required to be submitted in Microsoft Excel format with linked formulae to facilitate review.

7.1.3. IAs should take care to circulate results to stakeholders only after they are satisfied that the work on the model has reached a reasonable degree of maturity and that the results are stable.

7.1.4. Financial modelling is a complex area, and many rules require intelligent consideration to determine their applicability in any given context. Models should focus on material issues and be simple without over-simplifying. Adaptations of the required approach to financial modelling set out in these guidelines should be limited and only to the extent necessary and undertaken in consultation with GDPPP.

7.1.5. The contractual BCFM is the version of the financial model that is agreed by the parties at financial close as the basis for the project.

7.1.6. The BCFM should only be updated as contemplated in the PPP Contract. The PPP Contract should list the events that will be calculated using the BCFM and the extent to which the BCFM will be updated.

7.1.7. Where payments to the Private Partner need to be adjusted to offset the impact of a given event, the model is usually re-solved for the level of payment that leaves the equity IRR unchanged and that avoids any breach of the Private Partner's covenants with its lenders.

7.1.8. For small-value anticipated changes, the PPP Contract may set out the impact of the changes on the service revenue. In this case, the BCFM will not need to be re-solved, but the changes should eventually be reflected in the financial model.

7.1.9. An independent auditor should provide an audit and opinion regarding the suitability of the BCFM prior to financial close.

7.1.10. For unsolicited proposals:

- Although the Private Partner generally prepares the financial model, the IA should still be deeply engaged in analysing, reviewing and challenging the Private Partner's model. The IA may need to undertake its own modelling analysis (but usually without preparing its own financial model) to fully participate in this process. The Private Partner's model is adopted as the BCFM at the point of financial close.

- The IA should consider how to undertake appropriate VfM analysis of the unsolicited proposal. In some cases, this may involve building a comparator model for this purpose or other methods identified in Section 3 (Finalisation of the Base Case Financial Model (BCFM)).

7.2. Implementation Guidelines

7.2.1. The IA shall establish and maintain appropriate proper quality assurance processes, including seeking appropriate commercial and/or other advice as necessary, to validate any proposed modelling required during the term of the PPP Contract.

7.2.2. An independent auditor should review any BCFM following any agreed changes. The allocation of the costs of the auditor should be agreed in the PPP Contract.

7.2.3. The IA will maintain appropriate records of all financial modelling analysis that is undertaken, including version controls, especially in relation to the BCFM and any approved updates.

APPENDIX. BIBLIOGRAPHY

ACT Government. (2016). Guidelines for Public Private Partnerships. [Online] Available at: https://apps.treasury.act.gov.au/__data/assets/pdf_file/0010/869941/Guidelines-for-PPPs-Second-Edition.pdf

Addleshaw Goddard LLP. (2020). Change of law in the context of changes to fire safety legislation. [Online] Available at: https://www.addleshawgoddard.com/globalassets/events/webinars/pfippp-projects---4-part/hot-topics-in-pfi-ppp-projects_part-1/

Asian Development Bank. (2011). Public–Private Partnership Infrastructure Projects: Case Studies from the Republic of Korea, Volume 1: Institutional Arrangements and Performance. Asian Development Bank. [Online] Available at: https://www.adb.org/sites/default/files/publication/29032/ppp-kor-v1.pdf

Australian Transport Assessment and Planning. Tools and Techniques. [Online] Available at: https://www.atap.gov.au/tools-techniques/index

Business Standard. (2021). Cube Highways replaces Lanco in 80-km Nelamangala-Devihalli highway project. [Online] Available at: https://www.business-standard.com/article/companies/cube-highways-replaces-lanco-in-80-km-nelamangala-devihalli-highway-project-121011200808_1.html

Business World. (2022). DoTr gearing up for arbitration after rejection of LRT-1 fare hike. [Online] Available at: https://www.bworldonline.com/economy/2022/05/25/450913/dotr-gearing-up-for-arbitration-after-rejection-of-lrt-1-fare-hike/

Buying for Victoria. (2021). North East Link Project – Primary Package Project Deed. [Online] Available at: https://www.tenders.vic.gov.au/contract/view?id=195348

D'Andrea & Partners. (2021). Land Use Rights for Foreigners in Vietnam. [Online] Available at: https://www.dandreapartners.com/9038/

Department of Infrastructure and Regional Development. (2017). Base Cost Estimation. [Online] Available at: https://investment.infrastructure.gov.au/sites/default/files/documents/Guidance_Note_2_Base_Cost_Estimation.pdf

Department of Transport. (2013). Transport Analysis Guidance. [Online] Available at: https://www.gov.uk/guidance/transport-analysis-guidance-tag#guidance-for-the-appraisal-practitioner

Department of Transportation. (2008). MRT Line 7 Concession Agreement. [Online] Available at: https://www.foi.gov.ph/requests/aglzfmVmb2ktcGhyHgsSB0NvbnRlbnQiEURPVHItNzEwMTYxNjY3NDY5DA

Department of Treasury and Finance. (2017). Partnerships Victoria financing options. [Online] Available at: https://www.dtf.vic.gov.au/sites/default/files/2018-01/Guidance-Note-Partnerships-Victoria-financing-options.pdf

European PPP Expertise Centre. (2021). Termination and Force Majeure Provisions in PPP Contracts: Review of current European practice and guidance. [Online] Available at: https://www.eib.org/en/publications/epec-guide-to-public-private-partnerships

Financial Express. (2018). Lenders to replace Lanco Devihalli as operator of NH-48 in Karnataka. [Online] Available at: https://www.financialexpress.com/industry/lenders-to-replace-lanco-devihalli-as-operator-of-nh-48-in-karnataka/1290235/

Francois Bergere. (2016). Ten Years of PPP: An initial assessment. [Online] Available at: https://ppp.worldbank.org/public-private-partnership/sites/ppp.worldbank.org/files/2022-06/Ten_Years_of_PPP_in_France_-_OECD_Journal_on_Budgeting_2015.pdf

Global Center on Adaption. (2022). Multi-Stakeholder Climate Risk Dialogue: Banjul Port 4th Expansion Project Climate Risk Assessment. [Online] Available at: https://gca.org/events/multi-stakeholder-climate-risk-dialogue-banjul-port-4th-expansion-project-climate-risk-assessment/

Global Infrastructure Hub. (2022). Brabo I Light Rail Case Study. [Online] Available at: https://managingppp.gihub.org/case-studies/brabo-i-light-rail/

Global Infrastructure Hub. (2023). Zaragoza Tramway. [Online] Available at: https://managingppp.gihub.org/case-studies/zaragoza-tramway/

Global Infrastructure Hub. Daang Hari-SLEX Link Road - PPP Contract Management. [Online] Available at: https://managingppp.gihub.org/case-studies/daang-hari-slex-link-road/

Global Infrastructure Hub. PPP Contract Management: Refinancing. [Online] Available at: https://managingppp.gihub.org/report/construction-and-operations-routine-contract-management/refinancing/guidance/#C

Government of India. (2020). Scheme and Guidelines for forwarding proposals for financial support to Public Private Partnerships in Infrastructure under the Viability Gap Funding Scheme. [Online] Available at: https://dea.gov.in/sites/default/files/Notification%20of%20the%20Revamped%20VGF%20Scheme%20-%20%20DEA%20OM%20dated%207%20December%202020%20regarding%20Scheme%20and%20Guidelines%20for%20forwarding%20proposals%20for%20financial%20support%20to%20PPPs%20in%20Infrastructure%20under%20VGF%20Scheme_0.pdf

Government of the Kingdom of Cambodia. (2023). Guidelines. [Online] Available at: https://ppp.mef.gov.kh/fileadmin/user_upload/SOP_Guideline.pdf

Government of the Kingdom of Cambodia. (2010). Law on Expropriation. [Online] Available at: https://mef.gov.kh/assets/uploads/2020/07/expropriation-law-en.pdf

Government of the Kingdom of Cambodia. (2021). Law on PPPs. [Online] Available at: https://ppp.mef.gov.kh/fileadmin/user_upload/PPP_LAW_BOOK_New.pdf

Government of the Kingdom of Cambodia. (2022). SOP for PPP Projects, Volume 1: Policies and Procedures. [Online] Available at: https://ppp.mef.gov.kh/fileadmin/user_upload/SOP_Vol_1_15_03_23.pdf

Government of the Kingdom of Cambodia. (2022). SOP for PPP Projects, Volume II: Guidelines. [Online] Available at: https://ppp.mef.gov.kh/fileadmin/user_upload/SOP_Vol_2_21_03_23.pdf

Government of the Kingdom of Cambodia. (2022). SOP for PPP Projects, Volume III Procurement Manual. [Online] Available at: https://ppp.mef.gov.kh/fileadmin/user_upload/SOP_Vol_3_15_03_23.pdf

Government of the Kingdom of Cambodia. (2022). SOP for PPP Projects, Volume III: Procurement Manual Annexures. [Online] Available at: https://ppp.mef.gov.kh/fileadmin/user_upload/SOP_VOL_III_ANNEXURES_30_01_23.pdf

Government of the Netherlands. (2012). Model DBFM Agreement Infrastructure 2012. [Online] Available at: https://ppp.worldbank.org/public-private-partnership/library/model-dbfm-agreement-infrastructure-2012-modelovereenkomst-dbfm-infrastructuur-2013

Herbert Smith Freehills LLP. (2022). The Public-Private Partnership Law Review: Australia. [Online] Available at: https://thelawreviews.co.uk/title/the-public-private-partnership-law-review/australia

Herbert Smith Freehills LLP. (2022). The Public-Private Partnership Law Review: Italy. [Online] Available at: https://thelawreviews.co.uk/title/the-public-private-partnership-law-review/italy

Herbert Smith Freehills LLP. (2022). The Public-Private Partnership Law Review: United Kingdom. [Online] Available at: https://thelawreviews.co.uk/title/the-public-private-partnership-law-review/united-kingdom

HM Treasury. (2007). Standardisation of PFI Contracts Version 4. [Online] Available at: https://webarchive.nationalarchives.gov.uk/ukgwa/20130129110402/http:/www.hm-treasury.gov.uk/d/pfi_sopc4pu101_210307.pdf

HM Treasury. (2012). Standardisation of PF2 Contracts. [Online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/207383/infrastructure_standardisation_of_contracts_051212.PDF

HM Treasury. Application Note — Value For Money in Refinancing. [Online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/225371/08_application_note_value_for_money_280205.pdf

Indian Railways Institute of Transport Management. (2001). Model Concession Agreement For Annuity Based Project. [Online] Available at: https://iritm.indianrailways.gov.in/instt/uploads/files/1437042693976-MCA%20for%20annuity%20based%20project.pdf

Infrastructure and Projects Authority. (2021). Cost Estimating Guidance. [Online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/970022/IPA_Cost_Estimating_Guidance.pdf

Infrastructure Australia. (2008). National Public Private Partnership Guidelines: Overview. [Online] Available at: https://www.infrastructure.gov.au/sites/default/files/migrated/infrastructure/ngpd/files/Overview-Dec-2008-FA.pdf

Infrastructure Australia. (2011). National Public Private Partnership Guidelines Volume 7: Commercial Principles for Economic Infrastructure. [Online] Available at: https://www.infrastructure.gov.au/sites/default/files/migrated/infrastructure/ngpd/files/Volume-7-Commercial-Principles-for-Economic-Infrastructure-Feb-2011-FA.pdf

Infrastructure Australia. (2015). National Public Private Partnership Guidelines: Volume 2 Practitioners Guide. [Online] Available at: https://www.infrastructure.gov.au/sites/default/files/migrated/infrastructure/ngpd/files/Volume-2-Practitioners-Guide-Oct-2015-FA.pdf

Korea Development Institute. (2007). Summary of Study on Standard Financial Model for Public-Private Partnership Projects. [Online] Available at: https://www.kdi.re.kr/kdi_eng/kdicenter/bto_standard_financial_model.pdf

Law Insider. (n.d.). Exempt Refinancing Definition. [Online] Available at: https://www.lawinsider.com/dictionary/exempt-refinancing

Ministry of Finance. (2016). Government of India PPP Guide for Practitioners. [Online] Available at: https://www.pppinindia.gov.in/documents/20181/33749/PPP+Guide+for+Practitioners/

Ministry of Government Legislation, Korean Law Information Center. (2020). Act on Public-Private Partnerships in Infrastructure. [Online] Available at: https://www.law.go.kr/LSW/eng/engLsSc.do?y=0&x=0&menuId=1&query=Public%20private#liBgcolor0

Ministry of Road Transport and Highways. (2016). Hybrid Annuity Model for implementation of Highway Projects. [Online] Available at: https://morth.nic.in/standard-ham-documents

National Audit Office (UK). (2020). Managing PFI assets and services as contracts end. [Online] Available at: https://www.nao.org.uk/wp-content/uploads/2020/06/Managing-PFI-assets-and-services-as-contracts-end.pdf

National University of Singapore. (2012). Model for Negotiation of Refinancing Gain from Public-Private Partnership. [Online] Available at: https://www.researchgate.net/publication/273765703_Model_for_Negotiation_of_Refinancing_Gain_from_Public-Private_Partnership

New South Wales Auditor-General. (2009). Auditor-General's Report – Performance Audit: Handback of the M4 Tollway. [Online] Available at: https://www.audit.nsw.gov.au/sites/default/files/pdf-downloads/2009_Oct_Report_Handback_of_the_M4_Tollway.pdf

New South Wales Treasury. (2021). NSW Public Private Partnership Policy and Guidelines. [Online] Available at: https://www.treasury.nsw.gov.au/sites/default/files/2022-10/tpg22-21_nsw-public-private-partnership-policy-and-guidelines.pdf

New Zealand Infrastructure Commission Te Waihanga. (2013). Standard Form Public Private Partnership (PPP) Project Agreement. [Online] Available at: https://www.tewaihanga.govt.nz/assets/Uploads/Standard-Form-Public-Private-Partnership-PPP-Project-Agreement-v2.pdf

New Zealand Infrastructure Commission. (2020). Contractual Framework for the Standard Form Public Private Partnership (PPP) Project Agreement. [Online] Available at: https://www.infrastructure.govt.nz/assets/Uploads/Contractual-Framework-for-the-Standard-Form-Public-Private-Partnership-PPP-Project-Agreement.pdf

New Zealand Infrastructure Commission. (n.d.). PPP Practice Note: Expectations and Guidance for Refinancing Events. [Online] Available at: https://www.tewaihanga.govt.nz/assets/Uploads/Infracom-PPP-Practice-Note-Refinancing-final.pdf

New Zealand Infrastructure Commission. (n.d.). Standard Form Public Private Partnership (PPP) Project Agreement: Model Schedules. [Online] Available at: https://infracom.govt.nz/assets/Uploads/Standard-Form-Public-Private-Partnership-PPP-Project-Agreement-Model-Schedules.pdf

NITI Aayog. (2020). Public Private Partnership in Operation and Maintenance of Passenger Ropeways MODEL CONCESSION AGREEMENT (DRAFT). [Online] Available at: https://www.niti.gov.in/sites/default/files/2020-02/DRAFT-ModelConcessionAgreement-for-Setting-upPassengerRopewayProjects-underPublicPrivatePartnership.pdf

Novia Scotia Transport. (2020). Province, Dexter Nova Alliance Break Ground on Highway 104 Twinning Project. [Online] Available at: https://novascotia.ca/news/release/?id=20200717005#:~:text=The%20Highway%20104%20project%2C%20part%20of%20the%20Trans-Canada,and%2010%20kilometres%20of%20new%20four-lane%20twinned%20highway.

NSW Treasury. (2020). Project Summary City & Southwest OTS2 PPP. [Online] Available at: https://www.treasury.nsw.gov.au/sites/default/files/2020-03/Project%20Summary%20-%20OTS2%20PPP%20%28FINAL%20-%203%20March%202020%29.pdf

OECD. (2018). Climate Resilient Infrastructure. [Online] Available at: https://www.oecd.org/environment/cc/policy-perspectives-climate-resilient-infrastructure.pdf

Partnerships Victoria. (2012). Project Summary Victorian Comprehensive Cancer Centre project. [Online] Available at: https://www.dtf.vic.gov.au/sites/default/files/2018-01/VCCC-Project-Summary.pdf

Partnerships Victoria. (2016). Request for Proposal - Volume 1 - Part A – template. [Online] Available at: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.dtf.vic.gov.au%2Fsites%2Fdefault%2Ffiles%2F2018-01%2FTemplate-Request-for-Proposal-Volume-1-Part-A-November-2016-word.docx&wdOrigin=BROWSELINK

Partnerships Victoria. (2017). Partnerships Victoria financing Options. [Online] Available at: https://www.dtf.vic.gov.au/sites/default/files/2018-01/Guidance-Note-Partnerships-Victoria-financing-options.pdf

Partnerships Victoria. (2018). Availability PPP PV Standard Project Deed - Guidance Notes. [Online] Available at: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.dtf.vic.gov.au%2Fsites%2Fdefault%2Ffiles%2F2018-03%2FAvailability%2520PPP%2520PV%2520Standard%2520Project%2520Deed%2520-%2520Guidance%2520Notes.DOCX&wdOrigin=BROWSELINK

Partnerships Victoria. (2018). Contract Management Guidance. [Online] Available at: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.dtf.vic.gov.au%2Fsites%2Fdefault%2Ffiles%2F2018-02%2FContact-management-guide-final_0.docx&wdOrigin=BROWSELINK

Partnerships Victoria. (2021). Project Summary Homes Victoria Ground Lease Model project. [Online] Available at: https://www.dtf.vic.gov.au/sites/default/files/document/Ground%20Lease%20Model%20-%20Project%20Summary_1.pdf

Partnerships Victoria. (n.d.). Policy, Guidelines and templates. [Online] Available at: https://www.dtf.vic.gov.au/public-private-partnerships/policy-guidelines-and-templates

Public and Private Infrastructure Investment Management Center. (2010). Draft Standard Concession Agreement for Build-Transfer-Operate Projects. [Online] Available at: https://www.kdi.re.kr/kdi_eng/kdicenter/bto_standard_concession_agreement.pdf

Public Private Partnerships in India. (n.d.). Delhi Gurgaon Expressway. [Online] Available at: https://www.pppinindia.gov.in/toolkit/solid-waste-management/module3-rocs-dge6.php?links=dge6

Republic of Philippines. (2022). Revised Implementing Rules and Regulations to Philippine BOT law. [Online] Available at: https://ppp.gov.ph/wp-content/uploads/2022/09/20220927-Revised-IRR-of-BOT-Law-RA-6957-as-amended-by-RA-7718.pdf

Republic of the Philippines. (2016). Public-Private Partnership Centre, Generic Preferred Risks Allocation Matrix. [Online] Available at: https://ppp.gov.ph/press_releases/generic-preferred-risks-allocation-matrix-gpram/

RHTLaw Asia. (2021). COVID-19 Asia Guide to Force Majeure. [Online] Available at: https://www.rhtlawasia.com/wp-content/uploads/2021/12/COVID-19-Asia-Guide-to-Force-Majeure.pdf

Sport Singapore. (2022). Sport Singapore takes over the Singapore Sports Hub to unlock full potential for Singapore. [Online] Available at: https://www.sportsingapore.gov.sg/Newsroom/Media-Releases/2022/June/Sport-Singapore-takes-over-the-Singapore-Sports-Hub-to-unlock-full-potential-for-Singapore

Socialist Republic of Vietnam. (2021). Law on Public Private Partnership Investment. [Online] Available at: https://ppp.worldbank.org/public-private-partnership/library/ppp-laws-concessions-laws-vietnam

Swinburne University. (2020). West Gate Tunnel delays show risks of mega-projects. [Online] Available at: https://www.swinburne.edu.au/news/2020/02/west-gate-tunnel-delays-show-risks-of-mega-projects/

The Economic Times. (2020). NHAI clears IL&FS claims of Rs 902 crore. [Online] Available at: https://economictimes.indiatimes.com/markets/stocks/news/nhai-clears-ilfs-claims-of-rs-902-crore/articleshow/73603318.cms

The Sydney Morning Herald. (2013). Cross City Tunnel in administration. [Online] Available at: https://www.smh.com.au/business/cross-city-tunnel-in-administration-20130913-2tq4w.html

The Sydney Morning Herald. (2014). Cross City tunnel sold to Transurban for $475m. [Online] Available at: https://www.smh.com.au/business/cross-city-tunnel-sold-to-transurban-for-475m-20140327-35klq.html

The World Bank. (2006). The Financing of Water Infrastructure: A Review of Case Studies. [Online] Available at: https://documents1.worldbank.org/curated/en/259611468175789554/pdf/590700WP0Water1Box0349464B01PUBLIC1.pdf

The World Bank. (2017). Public Private Partnerships Reference Guide Version 3. [Online] Available at: https://ppp.worldbank.org/public-private-partnership/sites/ppp.worldbank.org/files/documents/PPP%20Reference%20Guide%20Version%203.pdf

The World Bank. (2019). Guidance on PPP Contractual Provisions, 2019 Edition. [Online] Available at: https://ppp.worldbank.org/public-private-partnership/library/guidance-ppp-contractual-provisions-2019

The World Bank. (2020). Government Guarantees for Mobilizing Private Investment in Infrastructure. [Online] Available at: https://ppp.worldbank.org/public-private-partnership/sites/ppp.worldbank.org/files/2020-02/Government-Guarantees%20for%20Mobilizing%20Private%20Investment%20in%20Infrastructure.pdf

U.S. Department of Transportation. (2017). Case Studies of Handback Experience with Public-Private Partnerships. [Online] Available at: https://www.fhwa.dot.gov/ipd/pdfs/p3/p3_handback_experience_010318.pdf

Victorian Auditor General Office. (2015). East West Link Project. [Online] Available at: https://www.audit.vic.gov.au/sites/default/files/20151209-East-West-Link.pdf

Victorian Auditor-General's Report. (2013). Operating Water Infrastructure Using Public Private Partnerships. [Online] Available at: https://www.audit.vic.gov.au/sites/default/files/20130821-Water-infrastructure-PPPs.pdf

White & Case. (2020). Vietnam's new Law on Public Private Partnerships. [Online] Available at: https://www.whitecase.com/insight-alert/vietnams-new-law-public-private-partnerships#:~:text=However%2C%20unlike%20previous%20transactions%20where%20the%20Government%20would,which%20reflects%20the%20more%20recent%20Vietnam%20market%20position.

World Health Organisation. (2020). WHO Director-General's opening remarks at the media briefing on COVID-19 11 March 2020. [Online] Available at: https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020

Disclaimer

The Guidebook on Public-Private Partnerships Contracts draws on international experience and best practices, ensuring consistency with Cambodia's Law on Public-Private Partnerships (PPP) and Standard Operating Procedures (SOPs). While the Guidebook provides a robust framework for the development, procurement, and management of PPP contracts, the specific terms and conditions of each contract are subject to government precedents and negotiation positions of the involved parties. It is recommended to consult with legal and technical experts to tailor the guidance to the specific requirements and circumstances of each project.

Address:

Street 92, Sangkat Wat Phnom, Khan Daun Penh, Phnom Penh

Tel: (+855) 23 890 666

gdppp@mef.gov.kh

www.ppp.mef.gov.kh

www.facebook.com/gdppp.mef.gov