

G:ENESIS

**Ghana Global Public-Private Partnership
Conference**

Developing and Designing PPP Projects

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Overview of PPPs

Developing a PPP project

Designing a PPP project

What is a PPP

A PPP is a long-term contract between a private party and a government agency, for providing a public asset or service, in which the private party bears significant risk

- The private sector party usually agrees to undertake the following:
 - Design and build or upgrade the public sector infrastructure
 - Assume substantial financial, technical, and operational risks
 - Receive a financial return through payments over the life of the contract from users, or the public sector, or from a combination of the two
 - Return the infrastructure to public sector ownership at the end of the contract (in some cases the private party may retain ownership of the asset).

Types of PPPs

Two main models:

- **Concession model**

- *The user pays (tolls, fares, etc.)*
- Most countries begin with concessions, and largest proportion of PPPs (outside U.K.) are concessions
- Not a new idea, especially for roads – e.g. 18th-century Britain
- Likely to be the most immediately relevant for Ghana

- **British Private Finance Initiative (PFI) model**

- *The public sector ministry/agency pays (usually for social infrastructure)*
- Adopted by many countries in the last few years

Key principles underlying PPPs

Value for money

Affordability

Risk allocation

Transparency

Competition

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Overview of PPPs

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Designing a PPP project

Delivering a PPP project

Project Identification

Developing the project idea

- Project development begins with the conceptualisation of different projects.
- In order for these ideas to be translated into a form that can be assessed, key information about the project needs to be documented.
- This should include the following:
 - Project location
 - Sector/Sub-sector focus
 - Key components
 - Objectives
 - Initial cost estimates
 - Alignment with the NDP
 - Key stakeholders and implementing authority
- Recording project ideas in this clear and standard format results in the following benefits:
 - Consistent assessment
 - Ease of comparison between projects
 - Ensuring that all critical aspects are captured

Project Identification - What makes a good PPP project?

- There are four central elements that underline a suitable PPP

Large asset with a significant capital base

Distinguishable cash flows

Scope for risk transfer

Stable technology

The capital cost of the asset should be high enough to justify the higher setup costs for this more complex type of procurement

The asset also requires long-term maintenance

The asset is self-contained, i.e. it can be built and operated as one unit

The asset has a long life, with little risk of technological obsolescence

Project Development – Concept note

- The Project Concept enhances the project idea and does some initial work to define the components that make up the project.
- This process includes all the steps that are necessary to bring the project to the Appraisal stage, which consists of prefeasibility and feasibility studies.



The project background must respond to three issues:

- 1) problem analysis,
- 2) previous experience, &
- 3) rationale for intervention

The project objectives should be logically connected to the investment and consistent with the policy priorities

Project Development – Concept note

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The Project Description must cover the range of technical, institutional, financial and socio-economic issues relevant to achieving the project's objective

In essence, the Project Description unpacks the objective statement

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Stakeholder identification will begin by compiling a list of the 'right' stakeholders, & identifying the role they play

- *Who will own the project?*
- *Who needs to approve the project?*
- *Who can influence project's success?*

Project Development – Concept note

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Risks are any factors (internal and/or external) that have the potential to delay or derail a project's implementation

It is crucial to identify the possible risks to the project early

Project Development – Concept note

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- This process includes all the steps that are necessary to bring the project to the Appraisal stage, which consists of prefeasibility and feasibility studies.



The Project Concept should clearly identify the next steps required to take the project forward

The technical, institutional, legal and financial capacity requirements must be clearly stated

Project Development – Pre-Feasibility

- The aim of pre-feasibility is to determine whether a project exhibits sufficient value to undergo a full feasibility
- The pre-feasibility provides a **high level assessment** of a project

Project Business Case

Institutional function

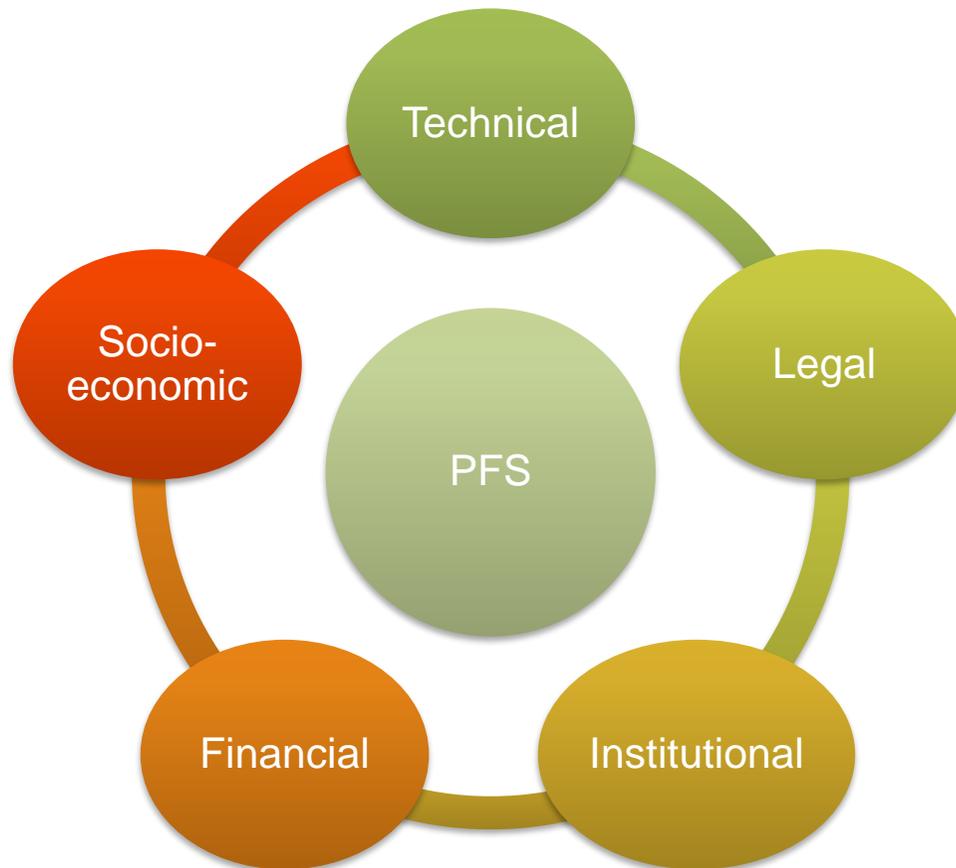
Technical description

Project costs

Project viability

Project Development – Pre-feasibility

- Focuses on the assessment of the various **technical options**
- PFS versus Detailed Feasibility
 - PFS is high level assessment and conceptual designs – no detailed engineering designs
 - Identifying technical options at a high level given available technologies



- Move to detailed feasibility after establishing **economic viability**

Project Development – Completion (Approval I)

- The Project Development (Project Inception) phase must be concluded with Approval I

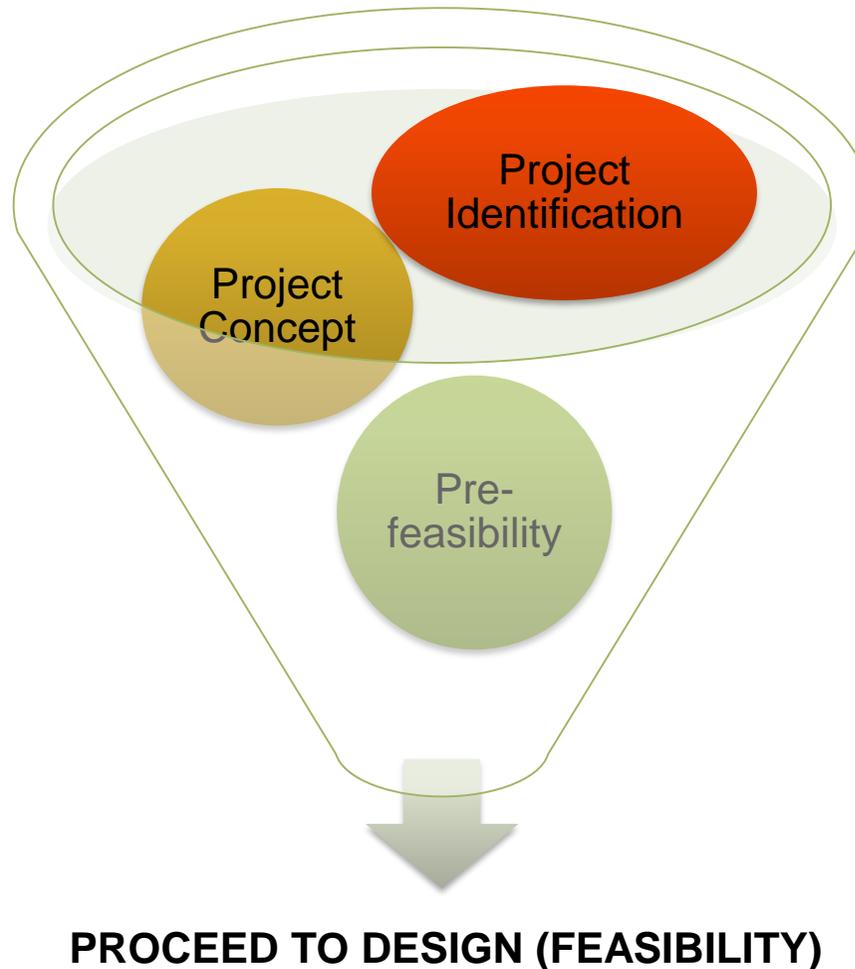


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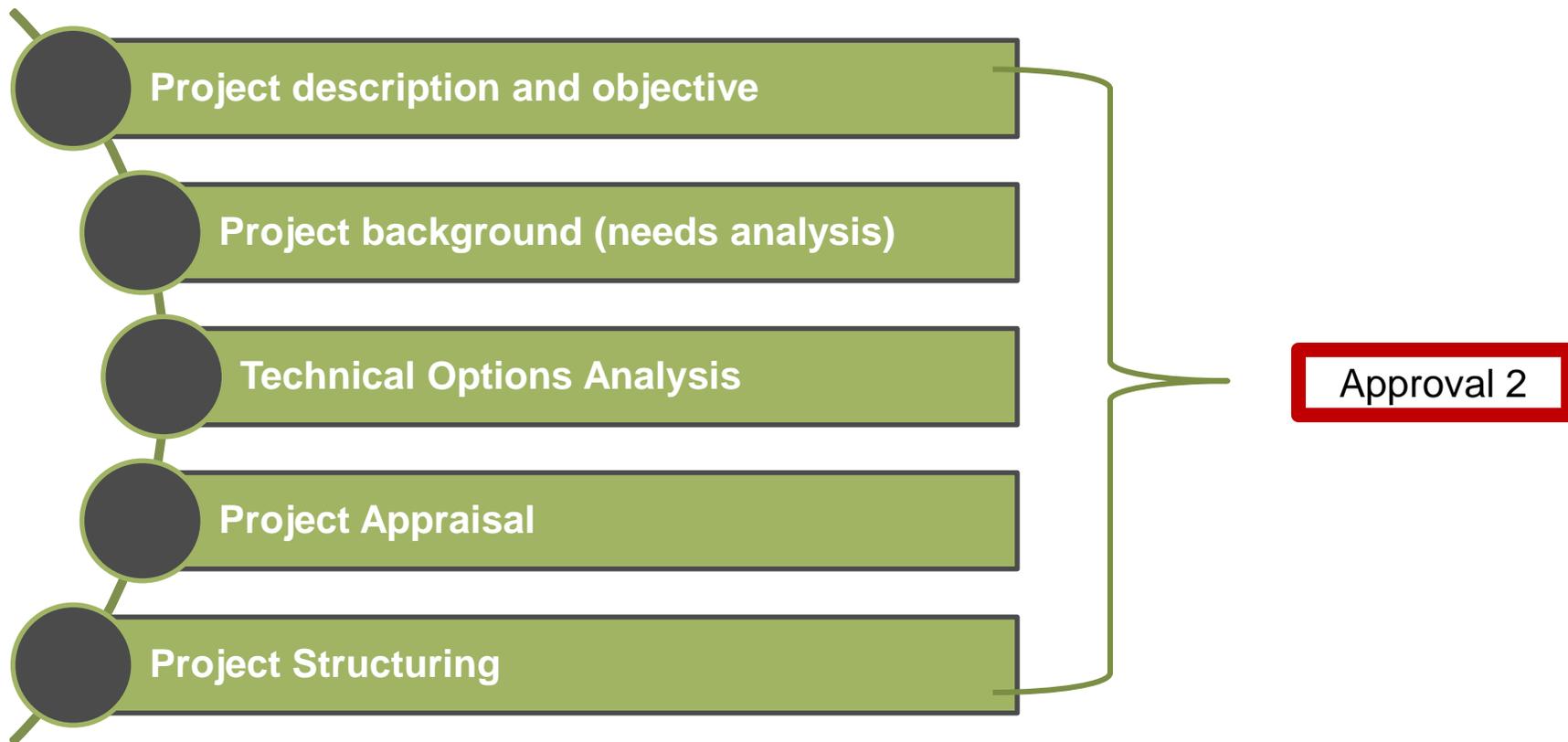
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Designing a PPP project

Designing a PPP Project

- The Detailed Feasibility Study is the key output of this stage.
- The DFS is a detailed assessment that aims to thoroughly evaluate whether there is value in financing and implementing a project.



Needs Analysis

The needs analysis gives definition to the proposed project, preparing the way for the options analysis

Specify the outputs

Ensure **alignment** with National and Local policy objectives and needs

Identify Local Government **financial and institutional capacity**

Define the scope of the project

Needs analysis – Defining the Output

- PPP projects are driven substantially by output specifications, which allow for optimal risk transfer to the private party and ensure greater value for money
- The Government leaves the design of the infrastructure to the private party
- For policy or strategic reasons, the Government may provide some input requirements
- Example of outputs for a secondary school infrastructure
 - Specify the accommodation standards (number of beds per room)
 - Catering, cleaning, maintenance standards
 - **NOT the actual materials**

Are outputs demand driven?

- Is there a demand for the project?
- Can this be translated into revenue, or is this purely a social good?
- Do users have a willingness to pay?
- Is the project a priority from the users perspective?

Instead of procuring infrastructure, the Government should be thinking of procuring the service with specified output

Needs analysis – Institutional capacity

- There needs to be a clear assessment of the Local Government's capacity to manage, process, evaluate, negotiate and implement the project
- It is important to identify where a lack of capacity exists – and what form it takes
 - Technical
 - Managerial
 - Financial
- Is there sign-off on the project's outputs at the right level?
- Are there other Government departments involved?

Financial Capacity is crucial

- What is the capacity of the Local Government to finance the project?
 - Fully, in part?
- It is usually assumed that the Local Government will not be fully able to finance the project, hence the consideration of a PPP
- What is the financial capacity for future budgetary commitments
- Is financing going to come from other Government sources?
 - National
 - Other departments

Options analysis

The options analysis sets out the range of possible technical, legal and financial options for delivering the required service to the output specifications

Identify and list
all options

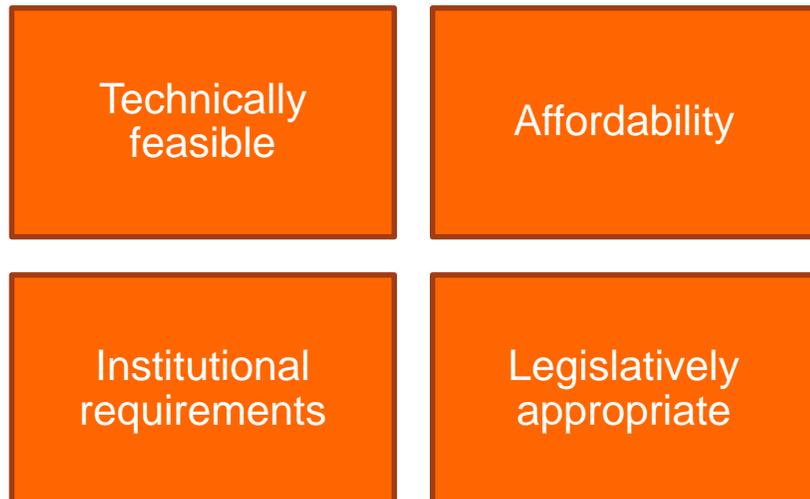
Evaluate each
option

Choose the best
solution option

Options analysis – Listing all options

- The Government must list all possible options it has considered
- This must cover the range of the most viable options for providing the specified outputs
- Beyond just a list – each solution option must be clearly described, outlining its key components, assumptions and dependencies
- A solutions matrix can be developed

ASSESSING THE VARIOUS OPTIONS



What are some options?

- *Will it be a greenfield or expansion of some existing infrastructure?*
- *Lease an existing infrastructure?*
- *Pure Public provision or will the private sector play a role in some form?*
- *What kind of Government support is possible?*

Options analysis – Selecting the best option

- A matrix approach can be used to weigh up the evaluation of each option against another

	Technically feasibility	Affordability	Institutional requirements	Legislatively appropriate
Option 1				
Option 2				
Option 3				
Option 4				

- The best solution will:
 - maximize the likelihood of achieving project objectives
 - minimize the likelihood of problems occurring later
 - improve management of risk and its consequences
- Not doing the project in certain circumstances is a viable option

Options analysis – assessing the project for a PPP

A PPP is NOT a solution option. A PPP may be a procurement choice for a preferred solution option

- In evaluating each solution option, there should be an initial assessment of its potential as a PPP
- If the solution option looks likely to be able to be procured through a PPP, it should be fully tested as such subsequently
- If more than one option is recommended for which PPPs may be possible, each must be separately assessed
- If the preferred solution option cannot be procured through a PPP, the Local Government should identify if other funding options are available
 - If not, it may be necessary to revisit the needs analysis to redefine the project outputs and scope

Project Appraisal

Financial Appraisal

- Detailed project costing and revenue structures
- Project finance arrangements
- Financial return expectations for the private sector
- Anticipated unitary payment
- Market assessment
- Project structure and value assessment

Economic Appraisal

- Direct economic impacts – job creation etc.
- Indirect economic impacts
- Cost Benefit Analysis

Legal Appraisal

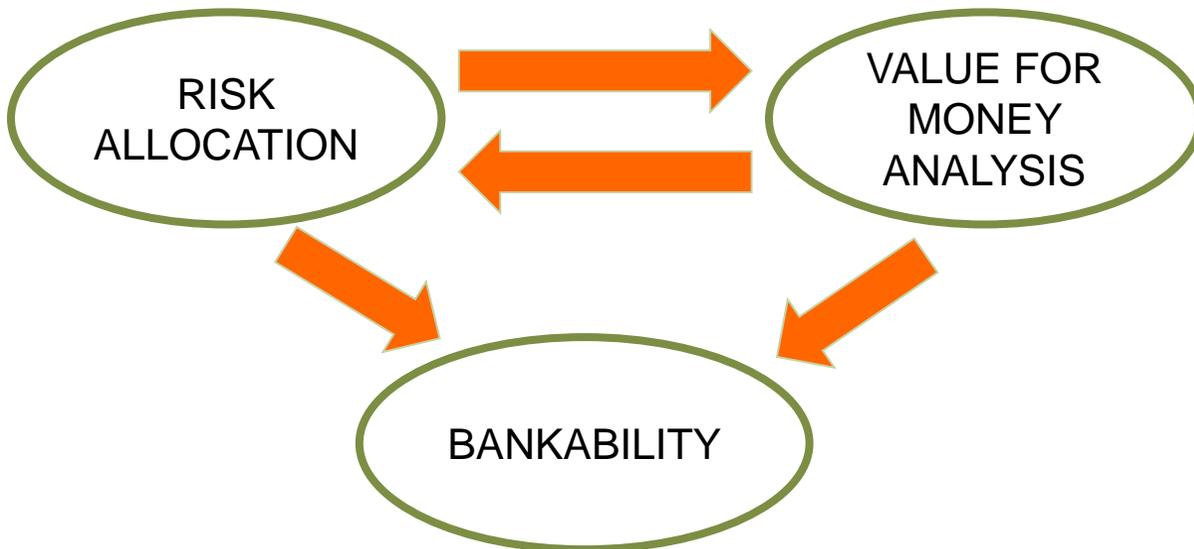
- Assessment of legal implications of selected option
- Review of legal framework for a PPP
- Develop a compliance matrix
- Other associated legislative issues – labour relations etc.
- Any existing contracts or litigation

Environmental/ Social Appraisal

- Identify all possible social and environmental impacts
- Engage with community stakeholders
- Conduct all required environmental tests

Overview of PPP structuring

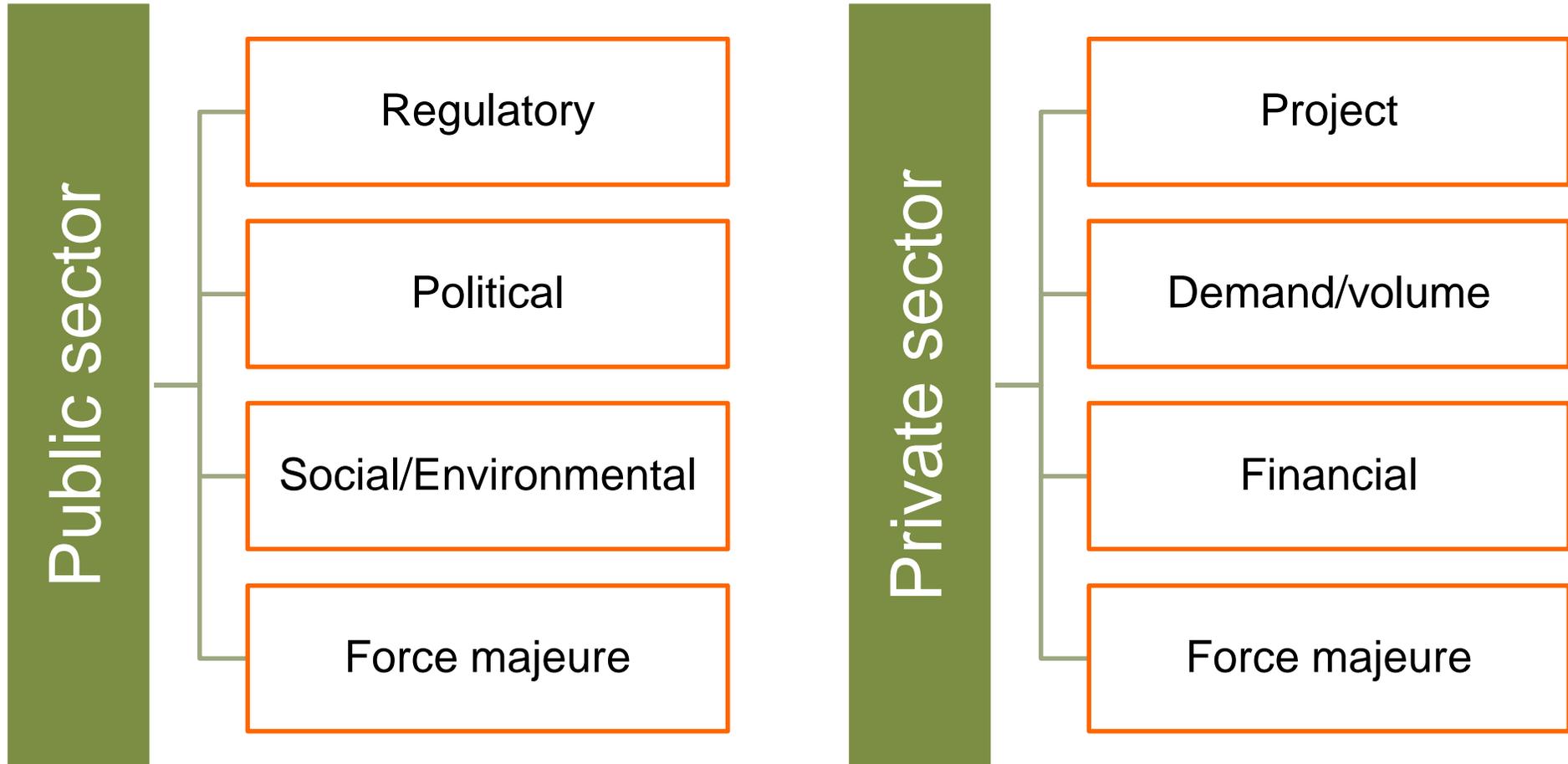
- There are 4 core components of developing an effective PPP structure:
 - Risk Allocation
 - Value for Money analysis
 - Bankability



- The PPP structure is developed **iteratively**
- The Risk Allocation and Value for Money analysis, while separate, are **closely linked and feed into each other**
- The tools required to complete the structuring are:
 - **A bankable feasibility study**
 - **Risk Matrix**
 - **PSC model**

Risk allocation

- The allocation of risks is between the public and private sector



Example of risk matrix

EXAMPLE

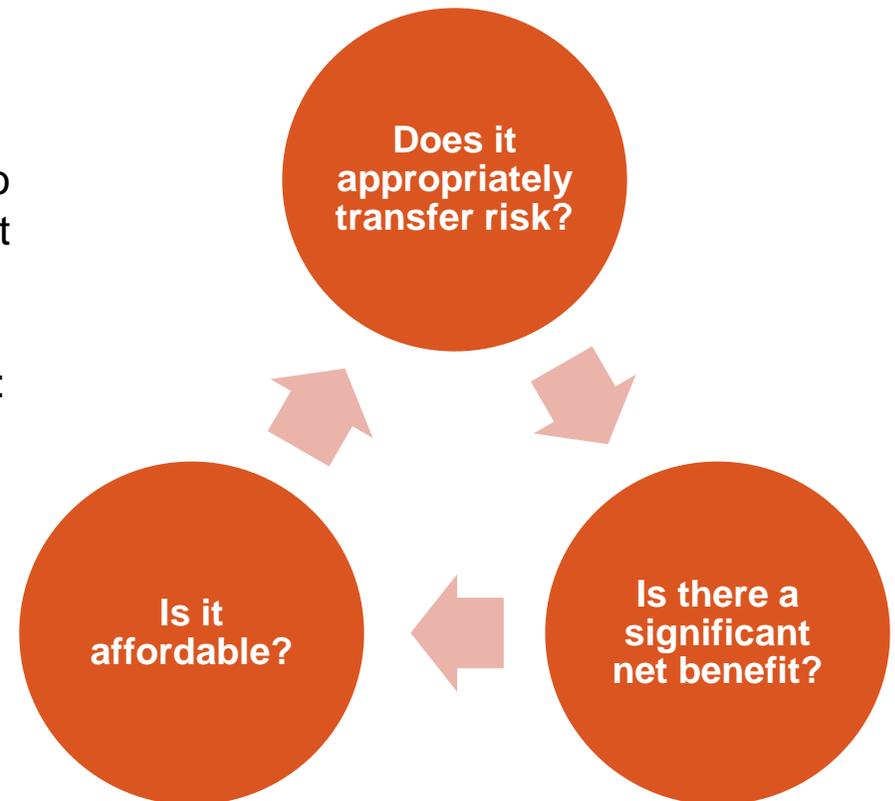
CATEGORY	ITEM	IDENTIFIED RISK	Level	POSSIBLE RISK MITIGATION MEASURES
Construction	Design	Over-design or under-design	High	Design consultant must be available at the bidding stage
	Construction	Geological conditions	Low	Select a consortium of contractors with complementing specialist skills
		Delay in approvals	Medium	Fast track put in place for processing planning applications
Operation	Revenue	Wrong demand estimates Inequitable tariff	High	Regulatory changes (e.g. mandatory courses at the DETC) to support some of the services offered Setting fees according to the value customers perceive a service to have
	Operating cost overruns	High maintenance cost	High	Maintenance cost should be based on agreed performance parameters
	Social acceptability	Non acceptance of fee structure	Medium	The objectives of the DETC should be publicised through a marketing and advertising strategy
Financial	Exchange rate	Devaluation	High	Hedging mechanism
	Interest rate	Increase	High	Loans raised on fixed interest rate
Political	Tax, legislation and policy	Change in legislation or Government policy negatively affecting the project viability	Low	A regulatory body should be empowered to take independent decisions
Force Majeure	Act of God	Loss due to the force majeure happening	Low	Explicit definition of force majeure and make use of insurance covers to address those risks

Value for money

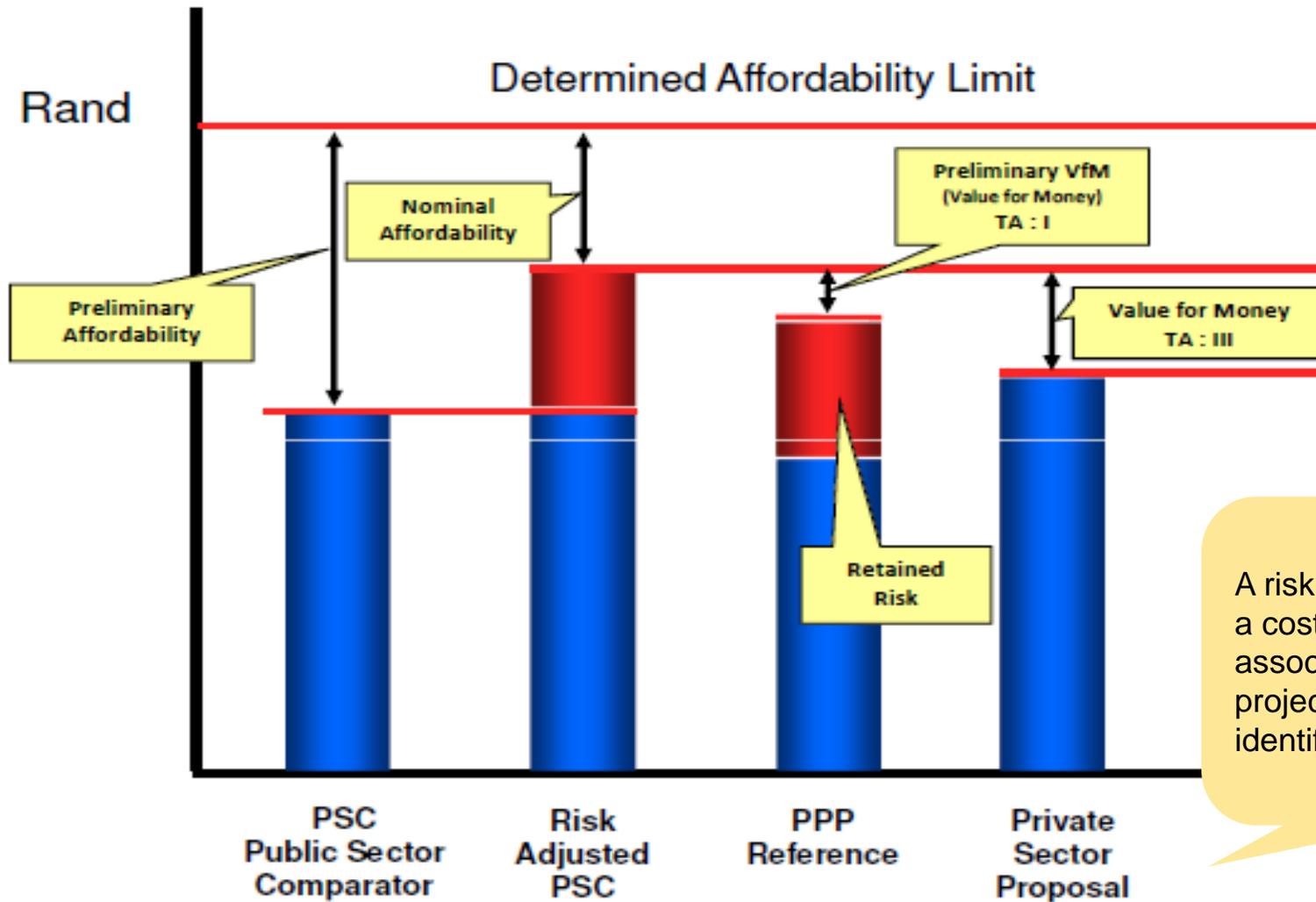
- What do we mean by Value for Money (VfM)

VfM means that the provision of a public sector function by a private party results in a net benefit to the public sector, defined in terms of cost, price, quality, quantity, risk transfer, or a combination of these.¹

- The VfM analysis allows the local Government to assess whether the PPP procurement is the best choice for the project.
- Three important questions need to be answered:



Value for Money - PSC



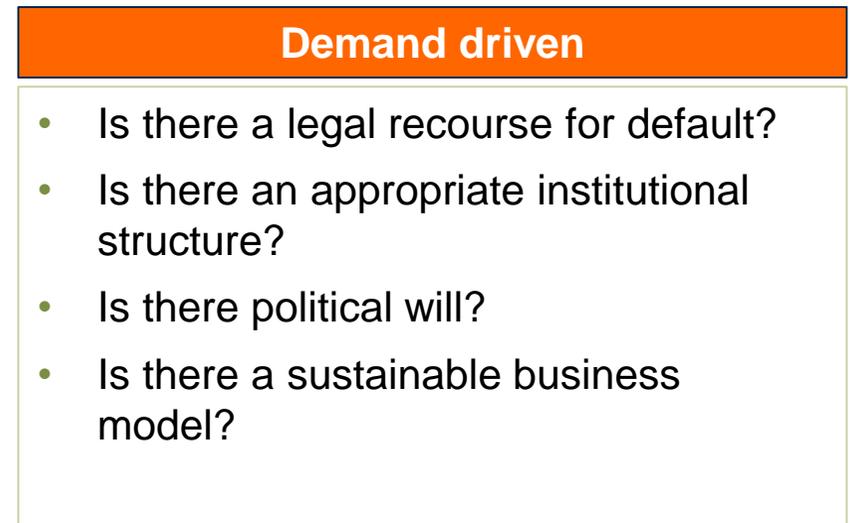
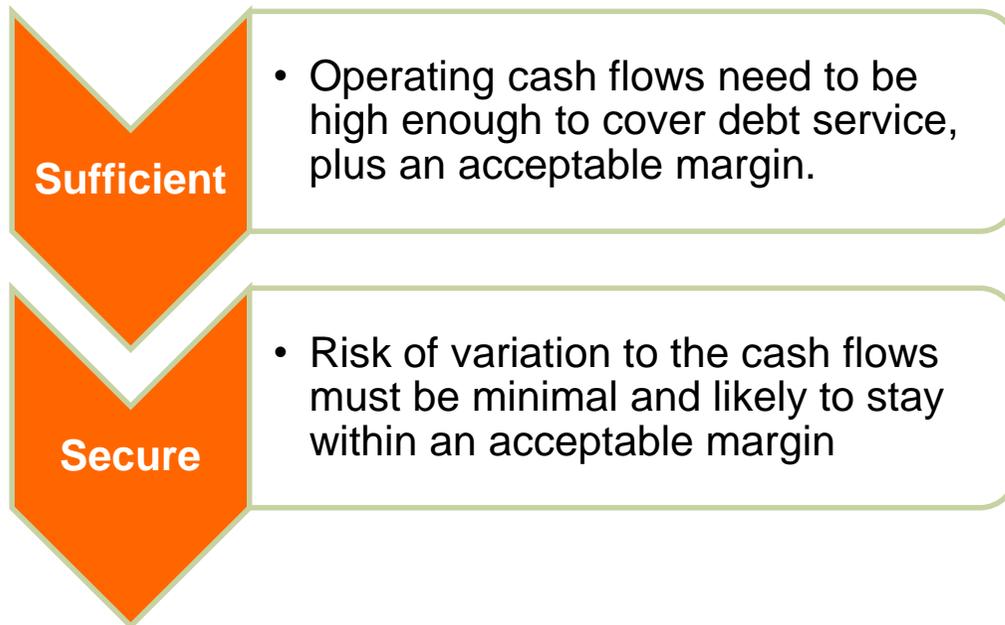
A risk-adjusted PSC includes a costing for all the risks associated with the project (Refer back to risk identification and allocation)

Bankability

- What do we mean by Bankability?

A bankable project is one that is suitably structured to attract private investment.¹

- PPPs typically work through the traditional project financing model – based on an asset with associated cash flows.
- Financiers of PPP projects usually look to the project's cash flows as the principal source of security. The two important elements of the cash flow is that they must be **sufficient** and **secure**.



Conclusion - Summary

- A well formulated project concept will ensure that no essential feature or component is left out of the scope of the appraisal
- The process of designing a PPP is a detailed assessment of project characteristics that aims to thoroughly evaluate whether there is value in financing and implementing a project
- Instead of procuring infrastructure, the Government should be thinking of procuring the service with specified output
- A PPP is NOT a solution option. A PPP may be a procurement choice for a preferred solution option
- VfM means that the provision of a public sector function by a private party results in a net benefit to the public sector, defined in terms of cost, price, quality, quantity, risk transfer, or a combination of these
- A bankable project is one that is suitably structured to attract private investment

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