# MDBs의 PPP 프로젝트 개념과 지식체계(BoK)

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MDBs' Body of Knowledge for PPP

PPP BoK was prepared by a core team of authors along with eighty peer reviewers from;

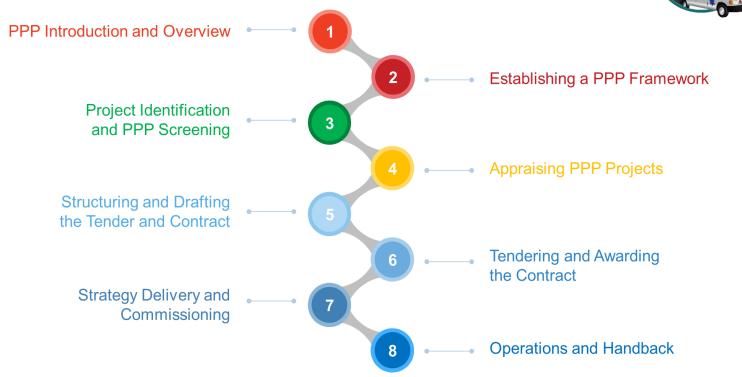
- Asian Development Bank (ADB),
- European Bank for Reconstruction and Development (EBRD),
- Inter-American Development Bank (IDB),
- Islamic Development Bank (IsDB),
- Multilateral Investment Fund (MIF) and
- World Bank Group (WBG).

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<sup>&</sup>quot; Specifically, our goals included standardizing our institutions' approaches, covering topics evenly, and assuring a sustainable delivery structure."

### MDBs' Body of Knowledge for PPP





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# MDBs' Body of Knowledge for PPP



Phase 1.	Project Identification and PPP Screening
• Objectives	To select the right project option To pre-assess the suitability of the project as a potential PPP
• Tasks	<ul><li>Identify/select project solution out of a number of options</li><li>Scoping the project</li><li>Screening the project as a potential PPP</li></ul>
Phase 2.	Appraising and Preparation Phase
<ul> <li>Objectives</li> </ul>	To assess whether the PPP project is feasible and prepare a PPP
• Tasks	<ul> <li>Refine the project scope and pre-design, test technical feasibility and assess environmental impact,</li> <li>Refine socio-economic feasibility/assessment(CBA)</li> <li>Assess PPP commercial feasibility including bankability and test the market,</li> <li>Preparation and due diligence and risk assessment</li> </ul>

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# MDBs' Body of Knowledge for PPP



Phase 3.	Structuring and Drafting Phase
<ul> <li>Objectives</li> </ul>	To define and develop a PPP contract solution and tender process
• Tasks	<ul> <li>Define the final structure of the project contract(financial structuring, risk allocation and structuring, payment mechanism), and outline the contract,</li> <li>Re-assess or confirm previous analysis(economic, financial, commercial-potentially including new market testing, and updating the PSC and affordability analysis)</li> <li>Structure and draft the RFQ and RFP,</li> </ul>
Phase 4.	Tender Phase(to award and sign contract)
• Objectives	To smoothly, but rigorously manage the process to select the best value proposal
<ul> <li>Tasks</li> </ul>	<ul><li>Launching the tender/ Qualifying bidders / Issue RFP,</li><li>Evaluating and negotiating proposals,</li><li>Awarding and calling for contract signature / Financial close</li></ul>

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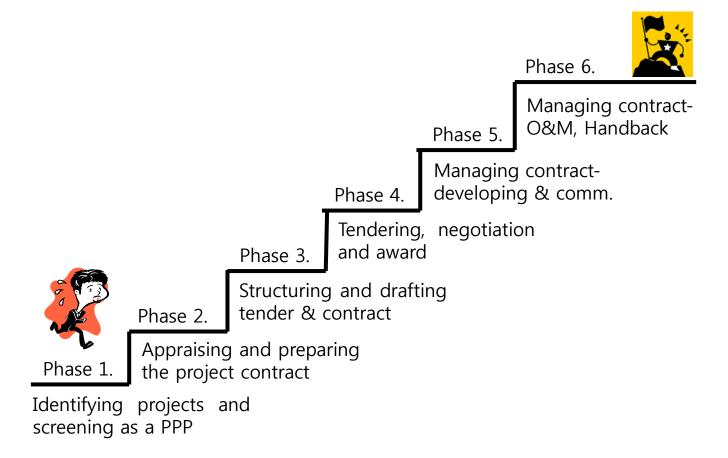
# MDBs' Body of Knowledge for PPP



Phase 5.	Contract Management Phase-Construction
<ul> <li>Objectives</li> </ul>	To proactively manage the contract so as to avoid or minimize the impact of risks and threats
• Tasks	<ul> <li>Establishing governance and a contract management team,</li> <li>Monitoring private party's compliance and performance</li> <li>Managing changes, claims and disputes</li> <li>Commissioning/acceptance and start of operations</li> </ul>
Phase 6.	Contract Management Phase-Operation(to finalization and handback
• Objectives	To proactively manage the contract so as to avoid or minimize the impact of risks and threats associated with changes, claims and disputes during the operation phase
• Tasks	<ul><li>Monitoring performance</li><li>Managing changes, claims and disputes</li><li>Preparing for hand-back, and Han-back and finalization</li></ul>

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### MDBs' Body of Knowledge for PPP



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#### Definition of a PPP



"A long term contract between a public party and a private party for the development (or significant upgrade or renovation) and management of a public asset (including potentially the management of a related public service), in which the private party bears significant risk and management responsibility throughout the life of the contract, provides a significant proportion of the finance at its own risk, and remuneration is significantly linked to performance and/or the demand or use of the asset or service so as to align the interests of both parties."

Source: Public-Private Partnerships Reference Guide V2.0 (World Bank 2014)

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#### Definition of a PPP

#### Core Words



- Long Term Contract between Public and Private party
- Development and management of public assets
- Significant risk and management responsibility undertaken by private party
- Providing finance at risk by private party
- Remuneration linked to the performance or demand

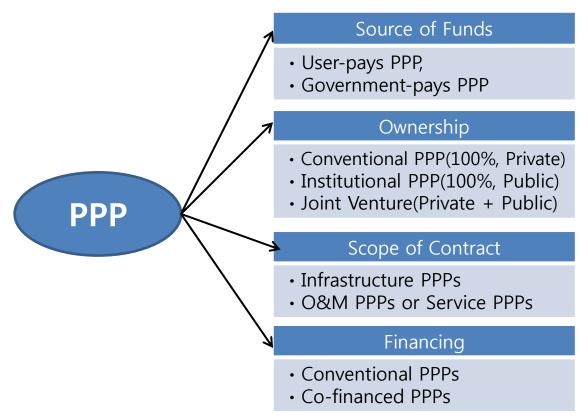
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### Type of PPP









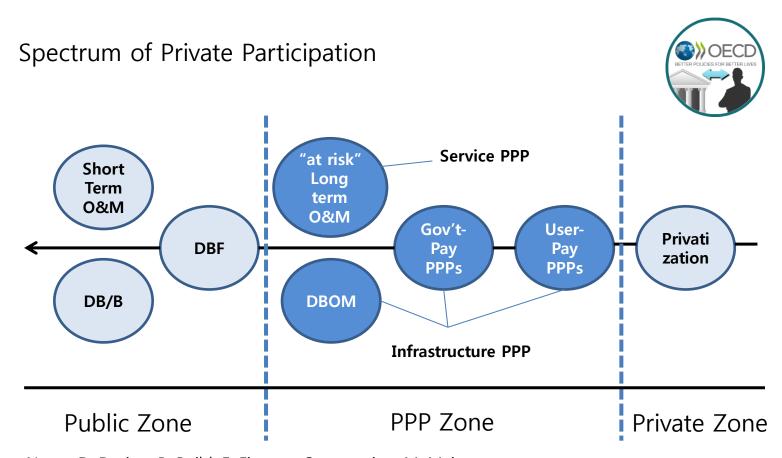
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### Infrastructure PPPs



Description	Examples
• Economic	Roads / Rail / Urban Mobility / Port/Airport / Water/Waste
Infrastructure	Energy / ICT / Tourism Agribusiness,
• Social	Health / Education / Prisons Facilities / Court Buildings
Infrastructure	Sport Center / Polish Station / Government Offices,
• Others	Fight simulation / Aircrafts(training, fighter) / Military facilities National border posts or facilities,

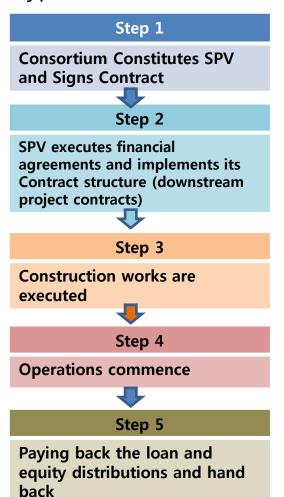
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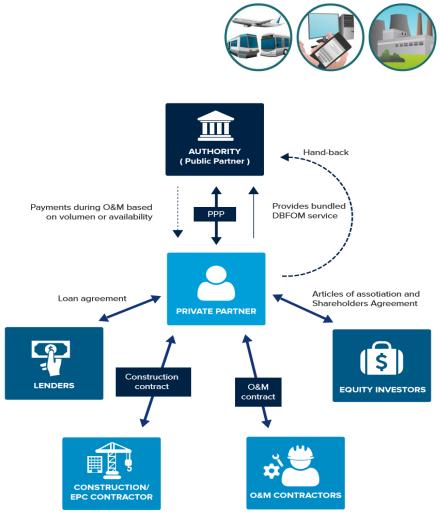


Notes: D: Design, B: Build, F: Finance, O: operation, M: Maintenance

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### Typical Structure of PPP





#### Reasons for PPPs

Demand Side



Financial Motivation of Government

- Off balance sheet
- Public borrowing limited by fiscal regulations
- Limited level of debt

and/or

A potential abuse of Long-term commitment of Public payment

- External Resources
- Additional source of funds
- Main driver of EMDEs

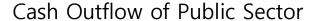
A legal limit on PPP procurement

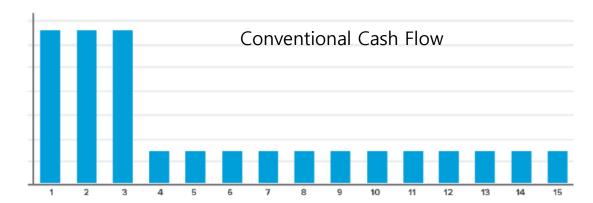
-as a percentage of the total budget

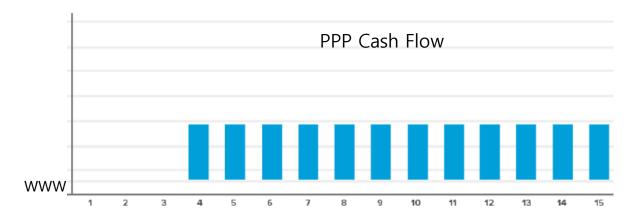
-a percentage of GDP

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#### Reasons for PPPs









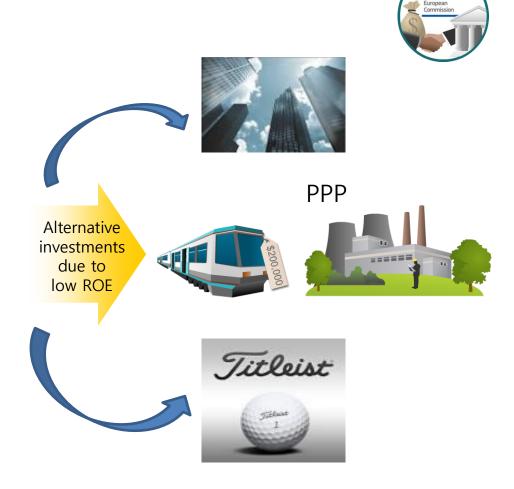
#### Reasons for PPPs

Supply Side

#### Institutional Investors/ Individual Investors

- Insurance companies
- Pension funds
- Sovereign funds
- Individual investors





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#### Reasons for PPPs





"Risk transfer to the private sector lies at the heart of incremental efficiency, and it is usually the most important driver of VfM"

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#### Reasons for PPPs



### Are PPP really more efficient?

Country	NAO(U.K.)*		NPF(Austr	alia)**
• Type	Conventional	PPP	Conventional	PPP
· Cost Overrun	73%	22%	10.1%	0.7%
• Delay	70%	24%	10.9%	5.6%

Source: The University of Melbourne in 2008
\* NAO: United Kingdom National Audit Office

\*\* NPF: Australia's National PPP Forum

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### Disadvantages and Pitfalls of PPPs



#### Disadvantages

- Significantly more complex
- Longer term for preparation than traditional procurement
- Finance is more expensive
- Much higher cost than traditional procurement
- More visibility with greater political exposure
- Public may view PPP as an excuse to increase costs
- Higher surveillance costs for government
- May be over committed in the longer term
- Rigidity in budget management
- Lack of competition post award

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#### Challenge for EMDEs



- Availability of long term finance
- Cross border financing only possible if one of these is available:
- FOREX risk hedging mechanisms, required for MDBs' role providing CCS
- Government insurance or guarantees against devaluation risks
- Political risk guarantee from ECA or presence of a MDBs as co-lender
- Increase tariffs based on CPI and or FOREX rate
- Reduce the size of the private finance package government provide part of the capital
- If not:
- Concentrate on hard currency projects
- Concentrate/restrict to DBOM projects

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### Project Common Failures in EMDEs



- The lack of time for a solid project preparation
- Insufficient analysis of risks
- Political pressure
- The presence of players;
- Who do not behave strictly according to the rules
- Who expect to get some advantage through influence

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#### Project Success Factors(Micro factors)



### Project Specific

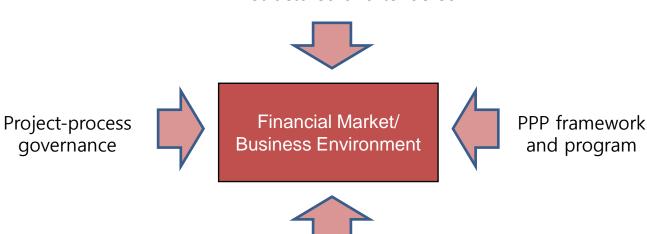
- Sufficient resources
- Clear identification of a Project Owner and a Project Champion
- An advocator for the Project outside the Project Team
- A clear decision framework
- Proper stakeholder management
- Fluent and clear communication

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Project Success Factors(Macro factors)



Right projects: Sensible, suitable, feasible, and soundly/properly structured and tendered



Market appetite and experiences in successful delivery of PPP projects

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#### **Project Success Factors**

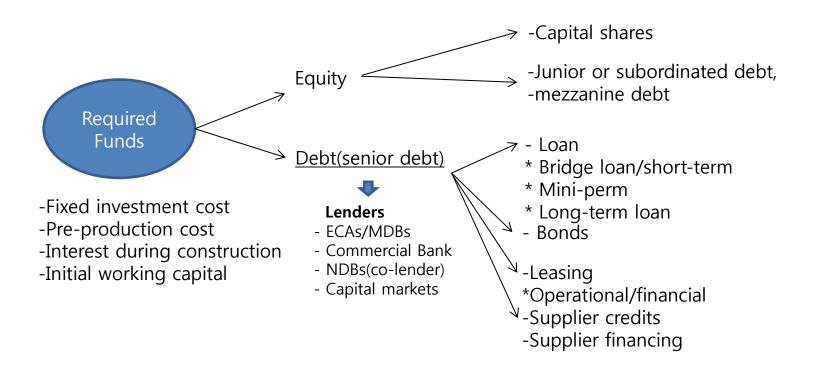


#### Do not;

- Plan and announce ambitious PPP programs beyond potential, define/select unrealistic projects or use unreliable or untested technology
- Use PPP for small projects
- · Use PPP because it is not accounted for as public debt
- Launch a PPP project unless it is prepared and assessed in economic, financial, commercial, affordability and technical terms
- Rush or set overly ambitious timelines
- Assume the government has finished its job once the contract is signed

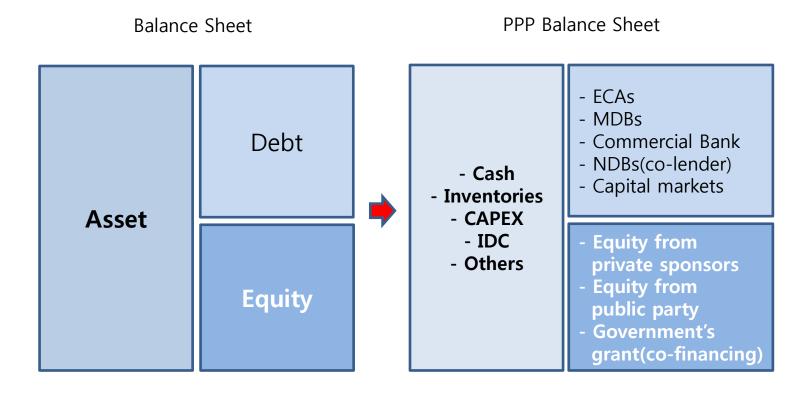
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#### How PPPs are financed?



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#### How PPPs are financed?



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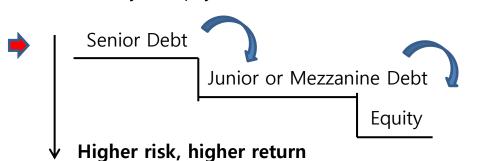
#### How PPPs are financed?

#### Source of Debt

- ECAs
- MDBs
- Commercial Banks
- NDBs(co-lender)
- Capital markets
- Institutional investors such as pension funds, insurance companies
- Project sponsors

#### Role of Financial Advisor

- Source of funding
- Cost and benefits of funding options
- Maturity and repayment



#### Debt cost

+ Underlying cost of funds

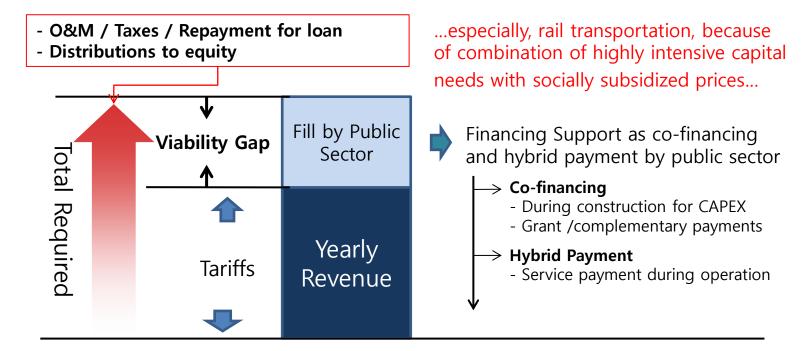
Priority in repayment

- + Default risk
- + Lender's cost
- . Operating cost
- . Opportunity cost of capital allocation
- . profit

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How PPPs are financed?

#### Viability gap funding.

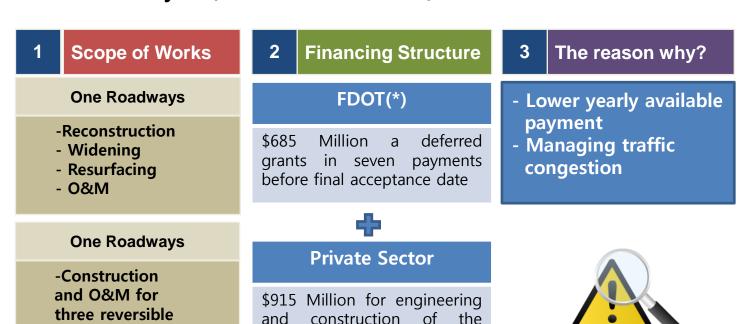


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#### How PPPs are financed?

#### FDOT\* PPP Project (CAPEX: U\$1.6 Billion) for I-595 Road

project



express lanes

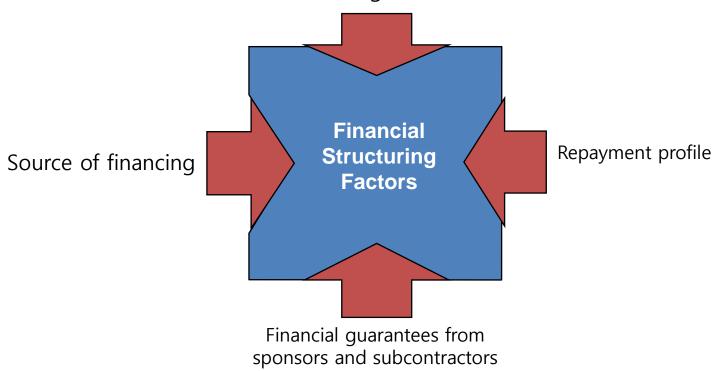
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<sup>(\*)</sup>Florida Department of Transportation

#### How PPPs are financed?



### Order and timing of drawdowns

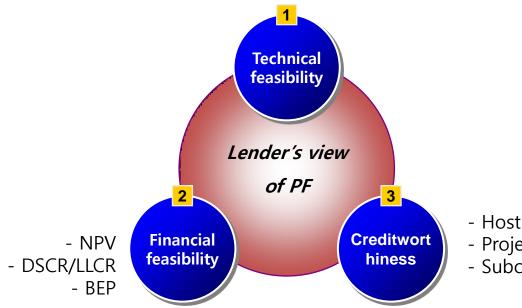


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#### How PPPs are financed?



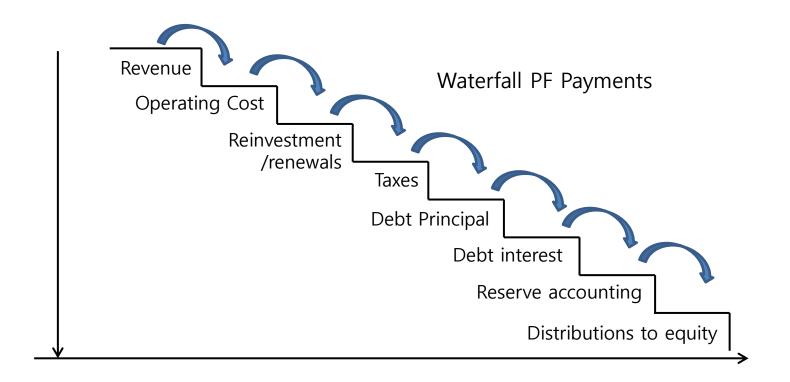
- Cost / Quality / Schedule
- Environment



- Host government
- Project sponsors
- Subcontractors

#### How PPPs are financed?



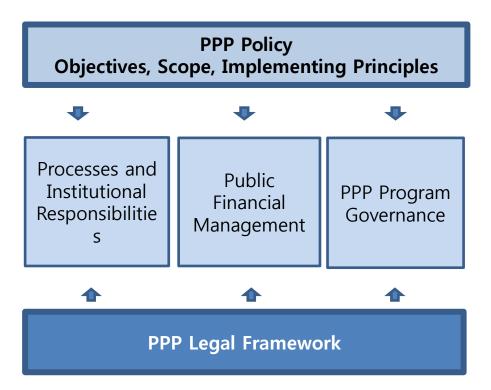


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### Section IV. -

#### PPP Framework Overview





"...the PPP framework means the policy, procedures, institutions and rules that together define how PPPs will be implemented – that is, how they will be identified, assessed, selected, budgeted for, procured, monitored and accounted for..."

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# Section V.

# For Success in PPP Project



• First	The project is the <b>right project</b> (that is, an optimal VfM project option is selected and is properly prioritized with respect to other possible projects.
· Second	PPP is the <b>right delivery model</b> for the project (that is, the PPP process is likely to deliver a better VfM outcome than traditional project method.
· Third	The project is <b>appraised/prepared</b> , <b>structured</b> and <b>managed</b> to minimize adverse impacts on <b>cost</b> , <b>time</b> , <b>scope</b> and <b>quality</b> .

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# Section VI. -

### Case Studies 1.



	Descriptions
• Project	Water and electricity services provision in Gabon
• Description	20-year concession for the production, transport, and distribution of both water and electricity in Gabon; the contract can be extended for several periods based on an addendum to the contract
• Financial Close	July 1997
• Financial Value	US\$ 135 million
• Consortium	Societe d'Energie et d'Eau du Gabon, comprising Vivendi Water(51 percent) and local shareholders (49 percent). The 49 percent sale of shares through a public offer was the first of its kind in Gabon. Employees were able to buy up to 5 percent the shares.

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# Section VI. -

### Case Studies 2.



	Descriptions
<ul> <li>Project</li> </ul>	Hospital Regional de Alta Especialidad del Bajio, Guanajuato State, Mexico
Description	25-year contract to design, build, finance, equip, operate, and maintain a 184-bed regional hospital and specialized medical support unit in the state of Guanajuato, Mexico
• Financial Close	December 2005
• Financial Value	US\$ 230 million(78 percent is debt and 22 percent is equity
• Consortium	Acciona

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# Section VI. -

### Case Studies 3.



	Descriptions
• Project	Queen Alia Airport Expansion, Amman, Jordan
Description	25-year contract to upgrade, expand, rehabilitate, operate, and maintain Queen Alia International Airport, Jordan.
• Financial Close	December 2007
• Financial Value	US\$ 675 million. Of which US\$ 370 million is debt and US\$ 305 million is equity
• Consortium	Airport International Group, comprising Abu Dhabi Investment Corporation of Abu Dhabi(40 percent), NOOR of Kuwait (25 percent), J& P Avax of Greece(10 percent), EDGO Investment Holdings of Jordan(10 percent), Joannou & Paraskevaides- J &P Avax subsidiary(10 percent), and Aeroports de Paris Management of France(5 percent)

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