

CAREC Public Private-Partnerships Awareness Workshop

STRUCTURING AND IMPLEMENTING PPP PROJECTS

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Structural Principles of PPPs

- PPPs are partnerships, and each partner should act in good faith to further the purposes of the partnership.
- Each partner's role should be clearly defined.
- Tasks should be assigned to each partner according to their ability.
- Risks should be allocated to the party best able to mitigate and manage them.
- Compensation should be based on each partner's tasks and assumption of risk.

Economic Objectives

- Reduce development risk
- Obtain project financing
- Reduce public capital investment
- Accelerate service availability
- Optimize value for money
 - Access to management expertise
 - Access to technology
- Optimize risk allocation
- Mobilize excess or underutilized assets
- Foster local capital markets
- Indirect economic benefits

Social Objectives

- Achieve legitimate political goals
- Improve service to the community, e.g., increased access to drinking water which meets WHO standards
- Extend services to remote or marginalized regions or populations
- Reduce income inequality
- Provide environmental enhancement

Project Objectives

Public sector objectives should be clearly defined, e.g.:

- Quality of service
- Quantity of service
- Cost of service
- Improved access to service
- Improved access for remote or economically disadvantaged communities

Prioritizing and Balancing Objectives

- Some objectives may be competing or mutually-exclusive.
- For example, a government may wish to:
 - Provide drinking water from the tap at the lowest possible cost to consumers
 - Extend water availability to remote areas which currently lack service, but where the required investment may increase the cost to some or all consumers
- For this reason, PPP objectives should be carefully assessed, prioritized, and balanced.

Project Objectives and PPP Contract Model

Government

Objectives:

Provide a new road from point a to point b

Relieve congestion

Improve commuter access and reduce travel time

Avoid government investment

Solution:

PPP Toll Road

Project Objectives and PPP Contract Model

Government Objectives:

- Provide a new road from point a to point b
- Relieve congestion
- Improve commuter access and reduce travel time
- Avoid politically unpopular user fees

Solution: PFI-type PPP, availability-based payments

Attracting Private Sector Investment

The private sector chooses which projects to participate in from amongst many investment alternatives. Investors seek investment opportunities where they may reasonably anticipate a fair return on their investments.

Transparent and predictable policies attract investors and reduce the need for sovereign guarantees.

Case Study

Portugal Road Sector Case Study

Portugal Road Sector Case Study

- In the early 1990's, Portugal had an extremely limited national highway network; approximately 600 kilometers of roadway.
- Portugal embarked on a PFI-based PPP approach to developing its highways.

Cumulative Motorway Network

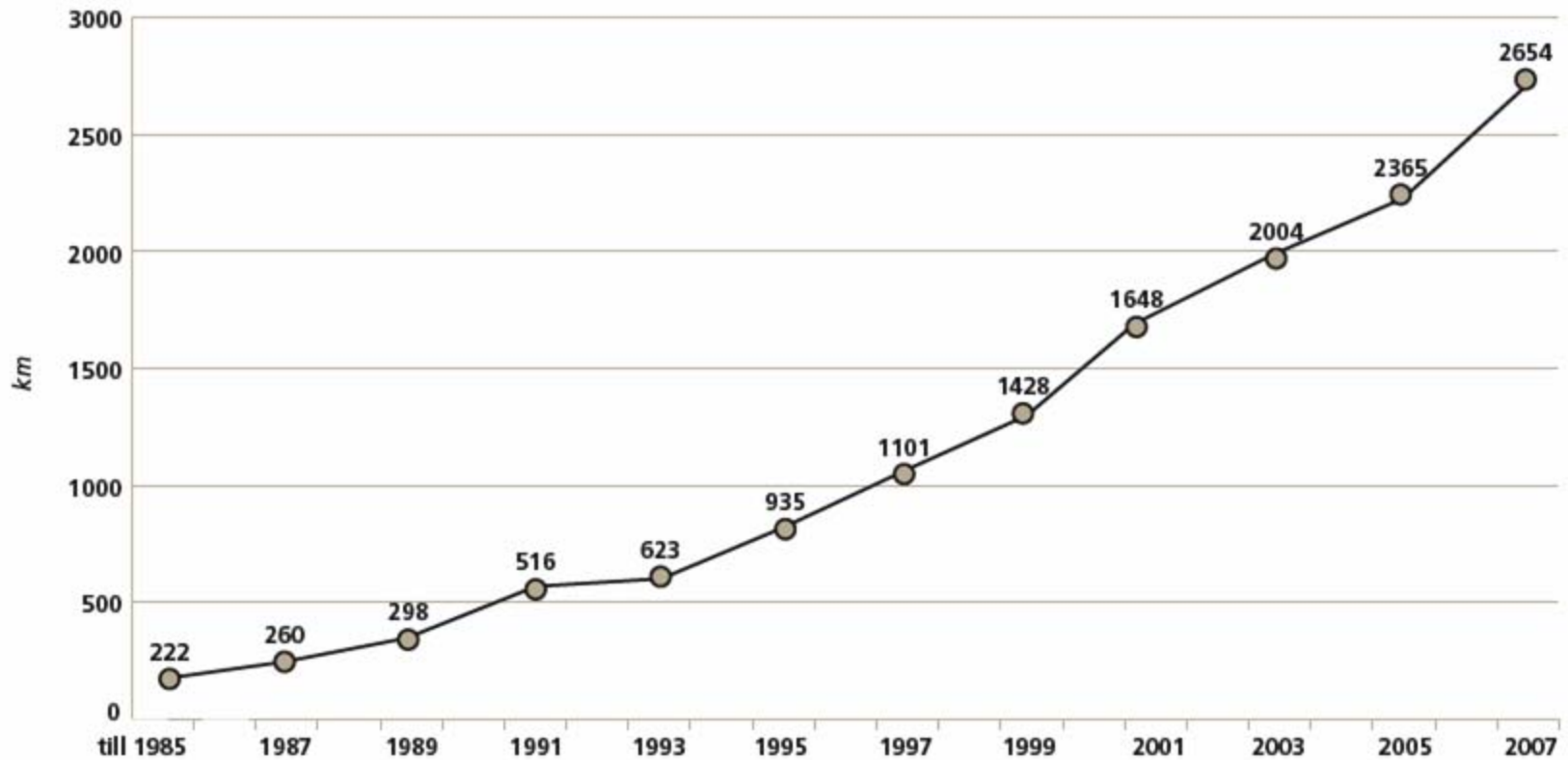
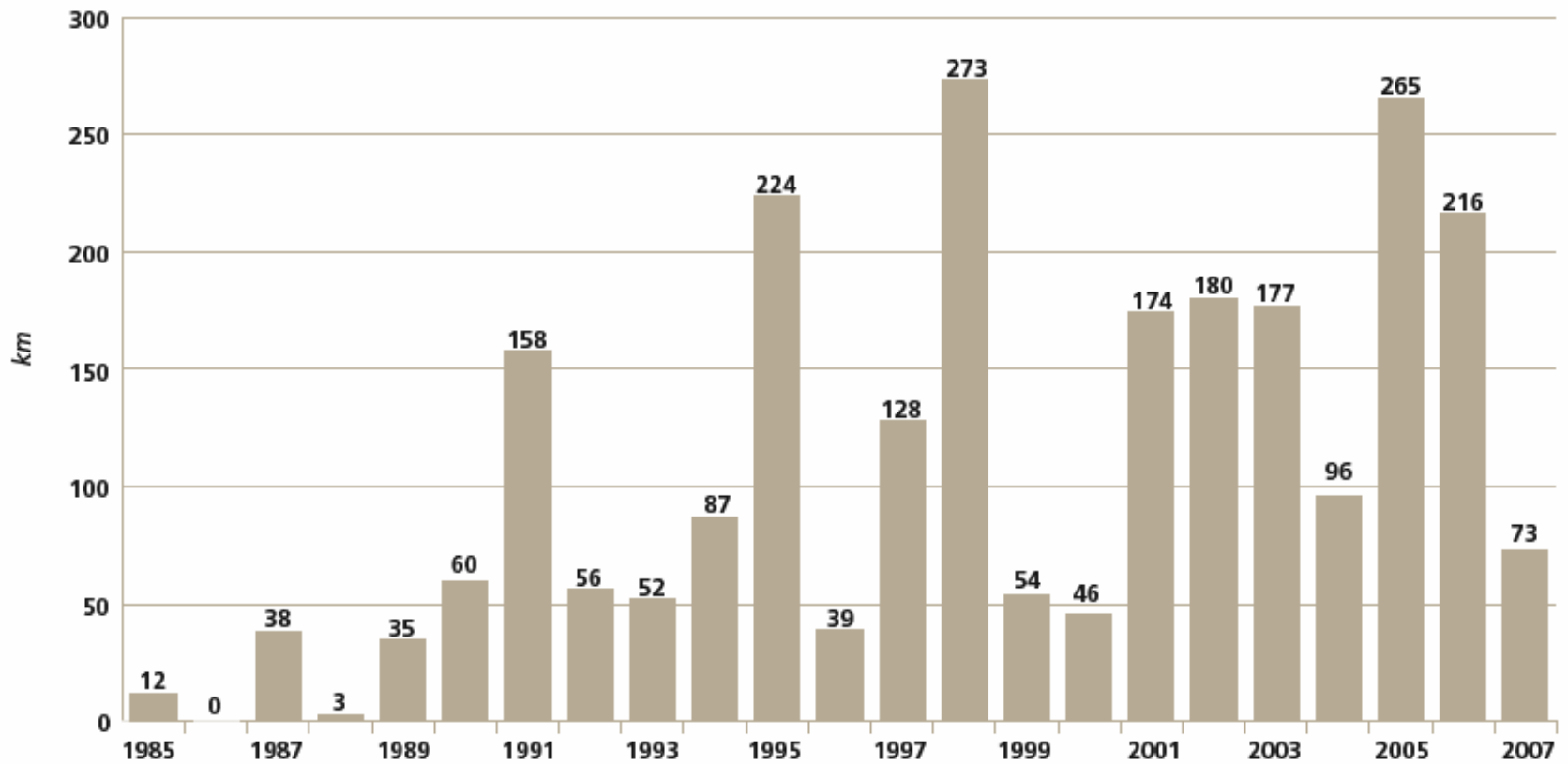


Figure 2. Construction of Portugal's National Motorway System.

Annual Opening to Traffic



Portugal Road Sector Case Study – Cont.

- Today, Portugal has a modern and extensive national highway system, 94 percent of which is operated via PPP.
- In the early 2000s, however, Portugal realized that its cumulative PFI payment obligations were reaching unsustainable levels.
- New PPP highway projects now generally use a toll-based model.

Attracting Private Sector Investment

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- Investors seek investment opportunities where they may reasonably anticipate a fair return on their investments.
- Transparent and predictable policies attract investors and reduce the need for sovereign guarantees.

PPP Risk Sharing – Private Sector and Public Sector Roles

- Any infrastructure project entails certain elements of risk. PPPs are no exception.
- Risks may include, but are not limited to
 - **Project Risks.** Risks inherent to the project or the environment in which it operates.
 - **Macro-economic Risks.** Risks related to external economic conditions not directly related to the project.

Project Risks

Design

Land Acquisition

Permitting

Construction

Operation and Maintenance

Environmental

Regulatory

Political

Force Majeure, etc.

Macro-economic Risks

Inflation

Interest Rates

Currency Exchange Rates

Risks must be identified, categorized and evaluated.

- Risks should be allocated to the party best able to mitigate and manage them.
- While not universally applicable, certain generalizations may be made about risk allocation.

Typical Risk Allocation Matrix

Private Sector	Shared	Public Sector
Design	Permitting	Land Acquisition
Construction	Force Majeure	Regulatory
Operation		Political
Demand		
Environmental		
Interest Rates		

Few of these rules should be regarded as universal. Take demand risk for a highway PPP as an example.

- The private partner could assume all demand risk (e.g., payments based solely on toll revenues).
- The government guarantees some level of traffic (e.g., 80 percent of projected traffic/toll revenue) and the private partner assumes incremental risks.
- The government makes availability payments, relieving the contractor of demand risk.

Risk allocation is both a financial and a liability decision.

- Risk assumption has a cost; similar to an “insurance premium.”
- For a sufficient sum, almost all risk can be transferred.
- However, each risk assumed by the private sector has a financial impact on a project’s bottom line.

Rate Setting Principles

- Service rates should be fair to both rate-payers and private partners.
- Calculation of rates should be objective and predictable.
- Rates should be calculated on a full-cost basis.
 - Protect investors
 - Make subsidies, if any, explicit
 - Make rate setting process transparent
- Affordability
 - Avoid discrimination among similar categories of users.
 - Subsidies may be appropriate for certain categories of users.

Rate Setting

- Revenue Requirement
 - Reasonable expenses passed through
 - Capital Costs
 - Debt: return equal to actual interest rate.
 - Equity: return meets need to gain sufficient capital, based on investments of comparable risk.
 - Concession payments to public partner
- Rate Design
 - From rate-payer: fixed and/or variable charges
 - Public contribution, if applicable
- Oversight by expert, independent organization

Rate Setting

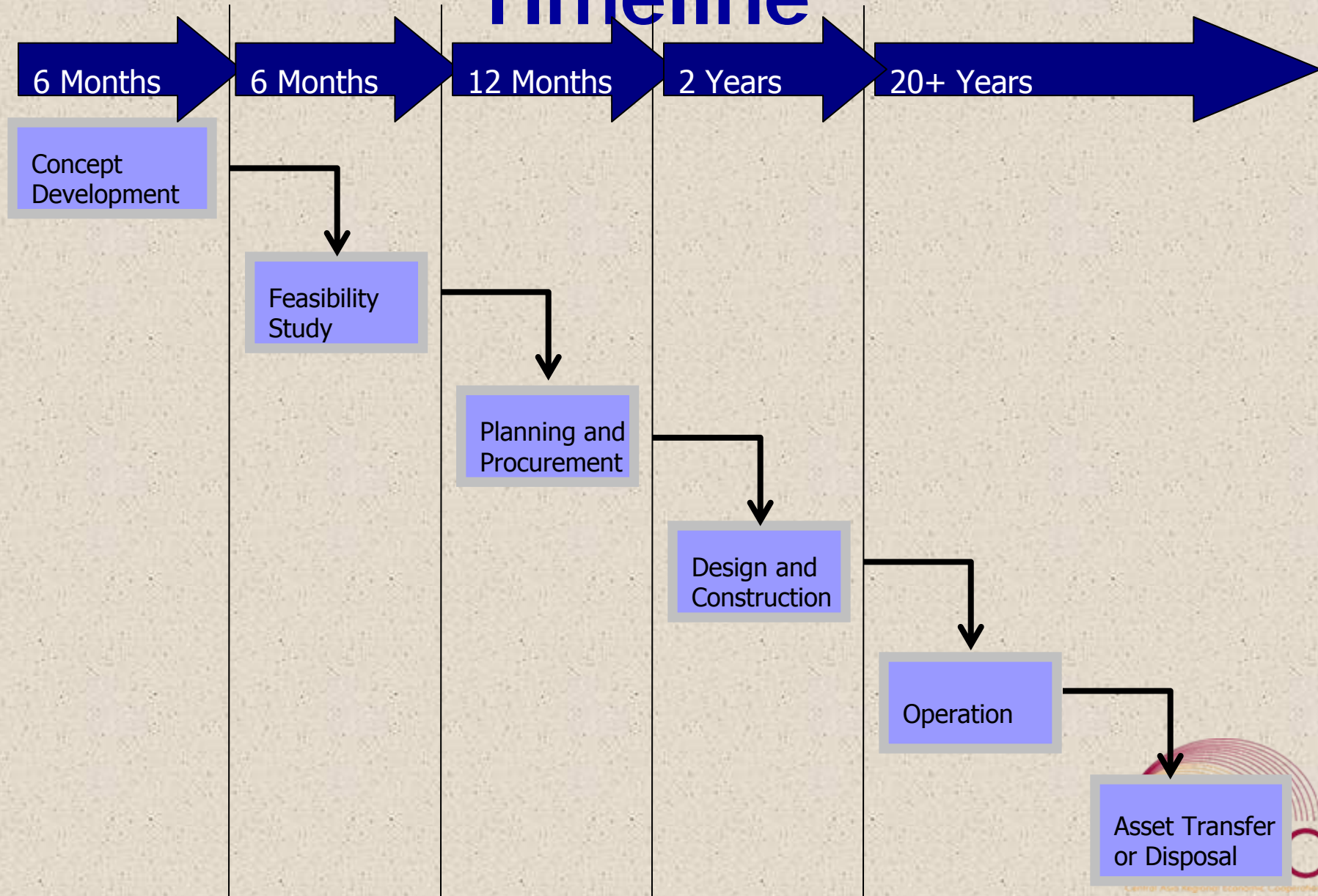
- Allow for adjustment for events outside partners' control.
 - Credit markets
 - Labor markets
 - Construction costs
 - Tax or regulatory changes
- Avoid price fluctuations.
 - Strive for rate equilibrium
 - Limit amount by which rates can grow

Unitary Payments

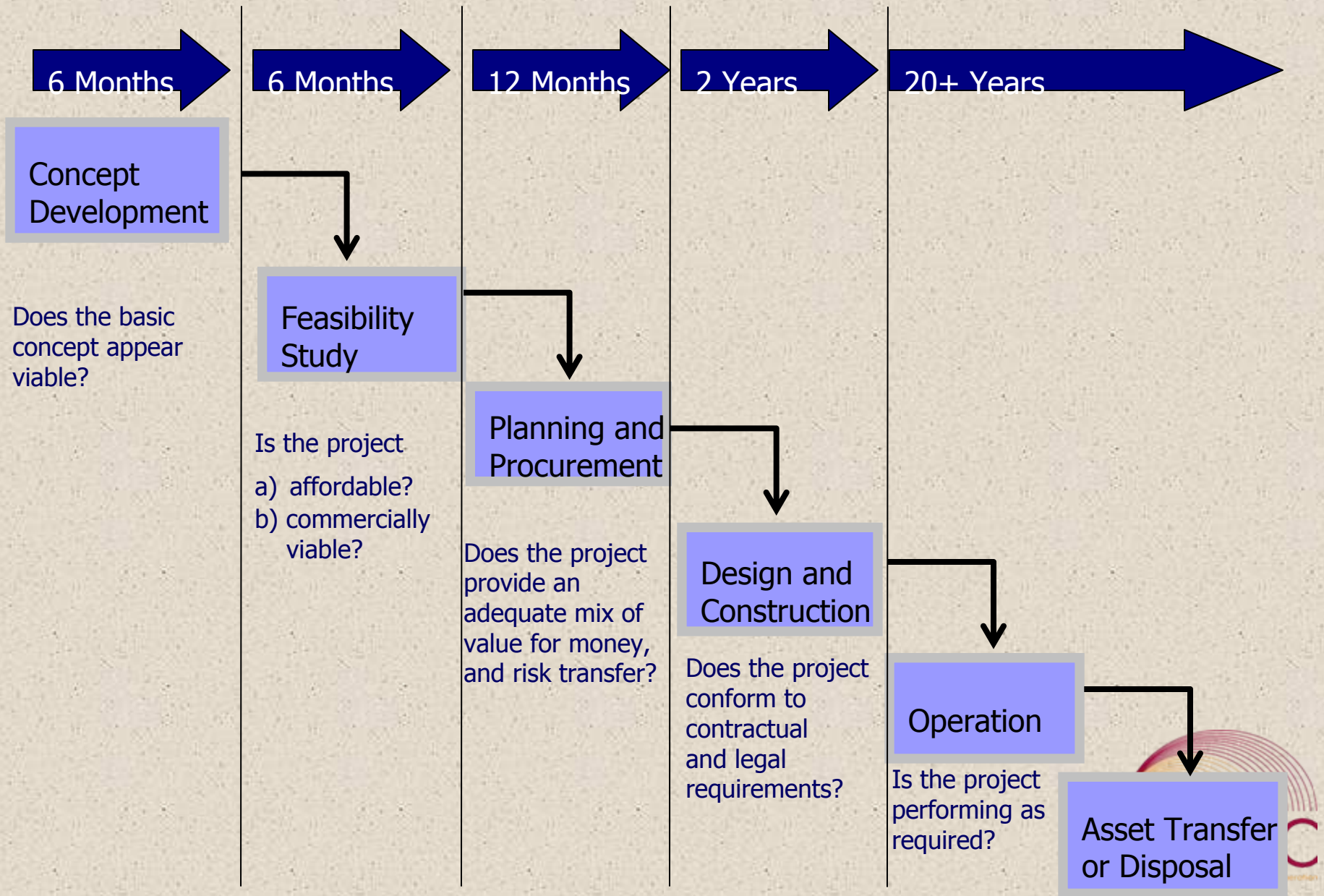
- A unitary payment is a single charge for a totality of service for a defined period of time (e.g., monthly). Payment is based on availability and performance.
- Contract must contain clear definitions of output standards, verifiable through objective measurements.
- Payment begins once project is operations, and services are delivered, subject to:
 - Deductions for services not performed to standard.
 - Deductions for nonavailability.
- Deductions should be proportional to impact of failures and commercially realistic.

Typical PPP Process

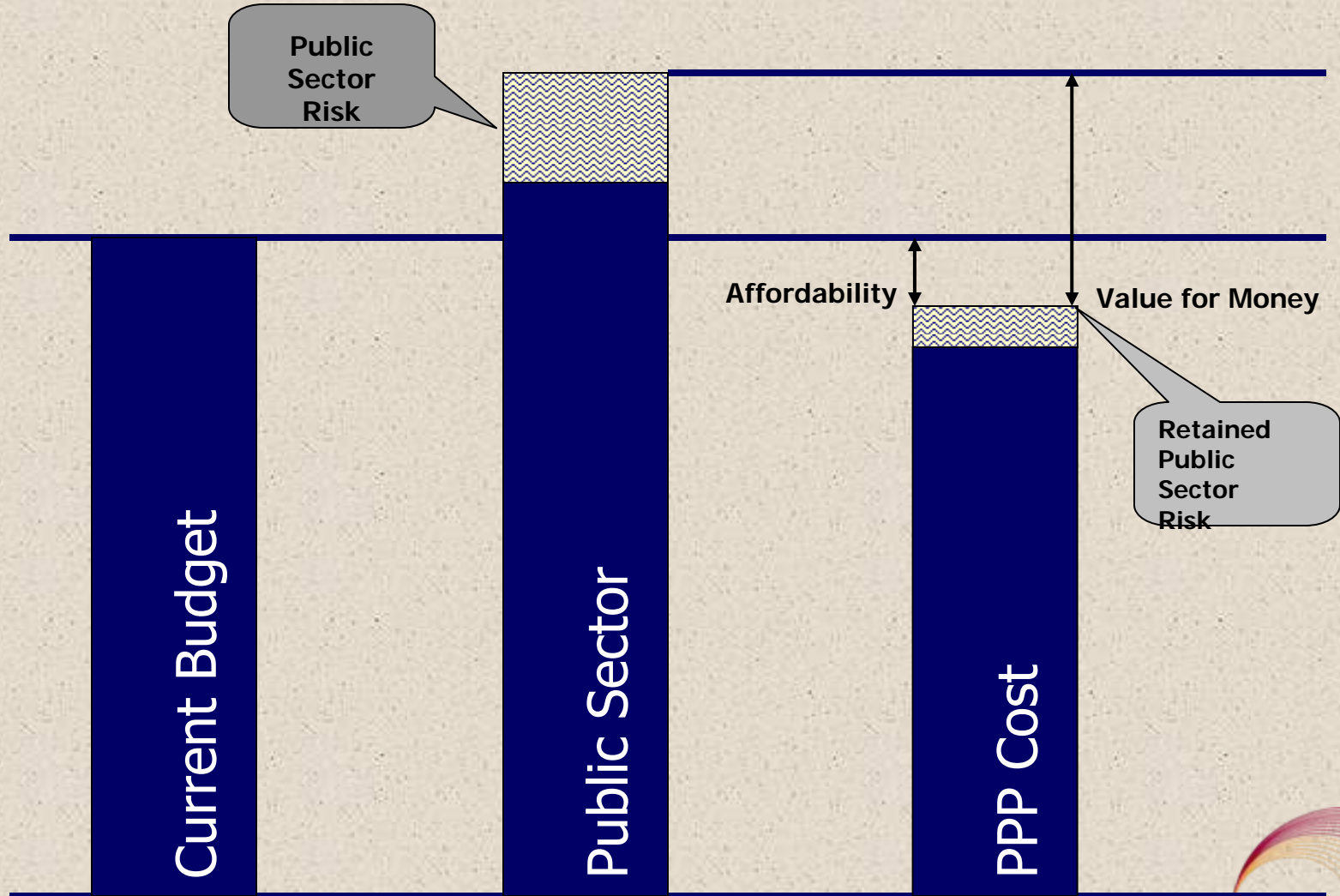
Timeline



Key Decisions



Value for Money



Performance-Based Specifications

- Promote innovation
- Allow flexibility in design
- Promote cost-effective techniques
- Reduce opportunities for change orders based on design errors

Performance Measures

Performance measures should be objective, measurable, and output-based, e.g.:

- Water: pressure, water quality, percent of households served
- Power: voltage variation, outages, percent of households served

The measures, and how they will be monitored, should be clearly stated in the contract.

Best Practices

- Open Competition
- Public Advertisement
- Negotiation
- Investors Termination Rights
- Tender Evaluation
- Appeals
- Dispute Resolution
- Post-Award Monitoring
- Audited Project Finance