

CAREC Public Private-Partnerships Awareness Workshop

STRUCTURING AND IMPLEMENTING PPP PROJECTS

**Tashkent, Uzbekistan
24 June 2010**

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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

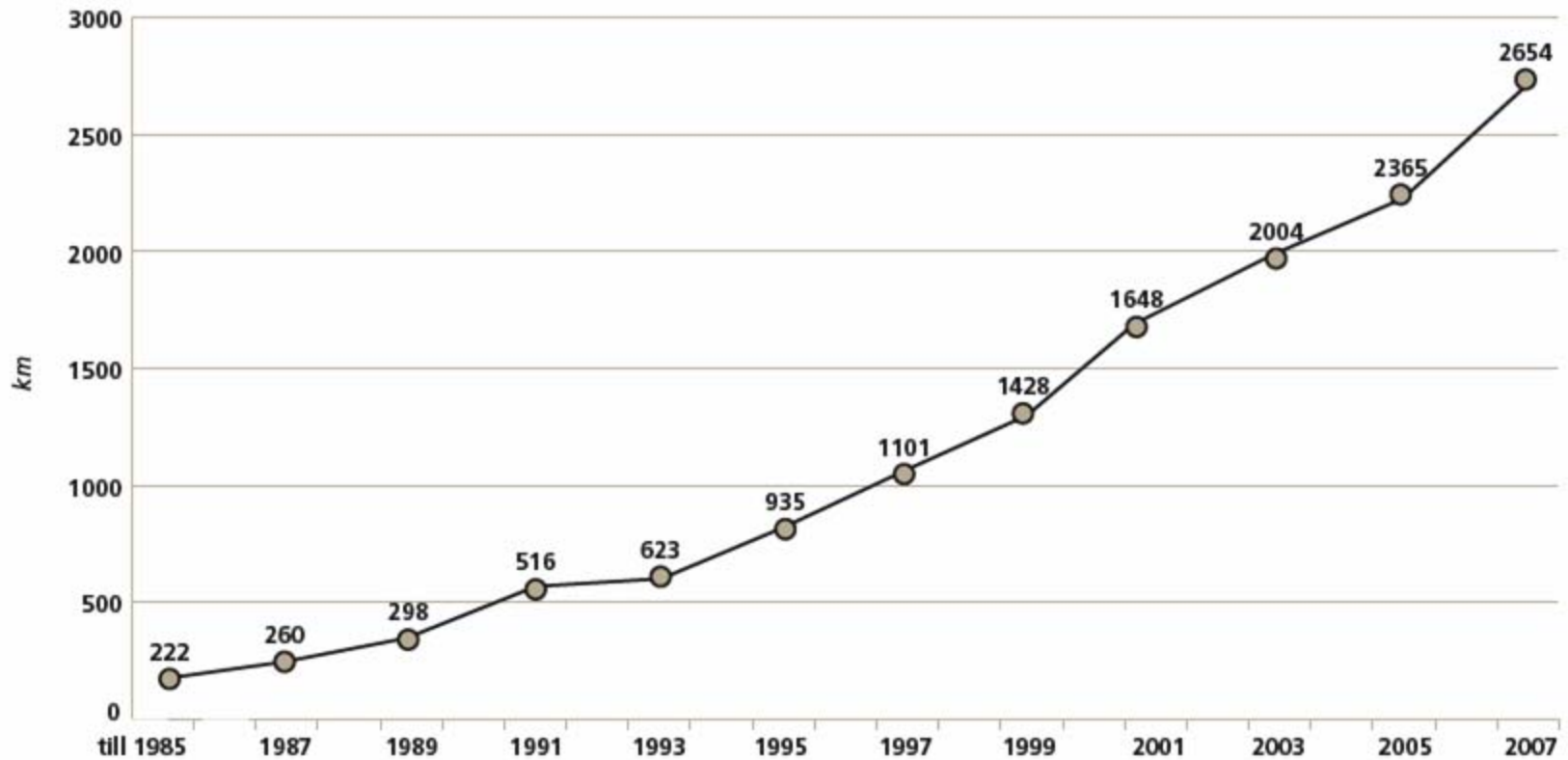
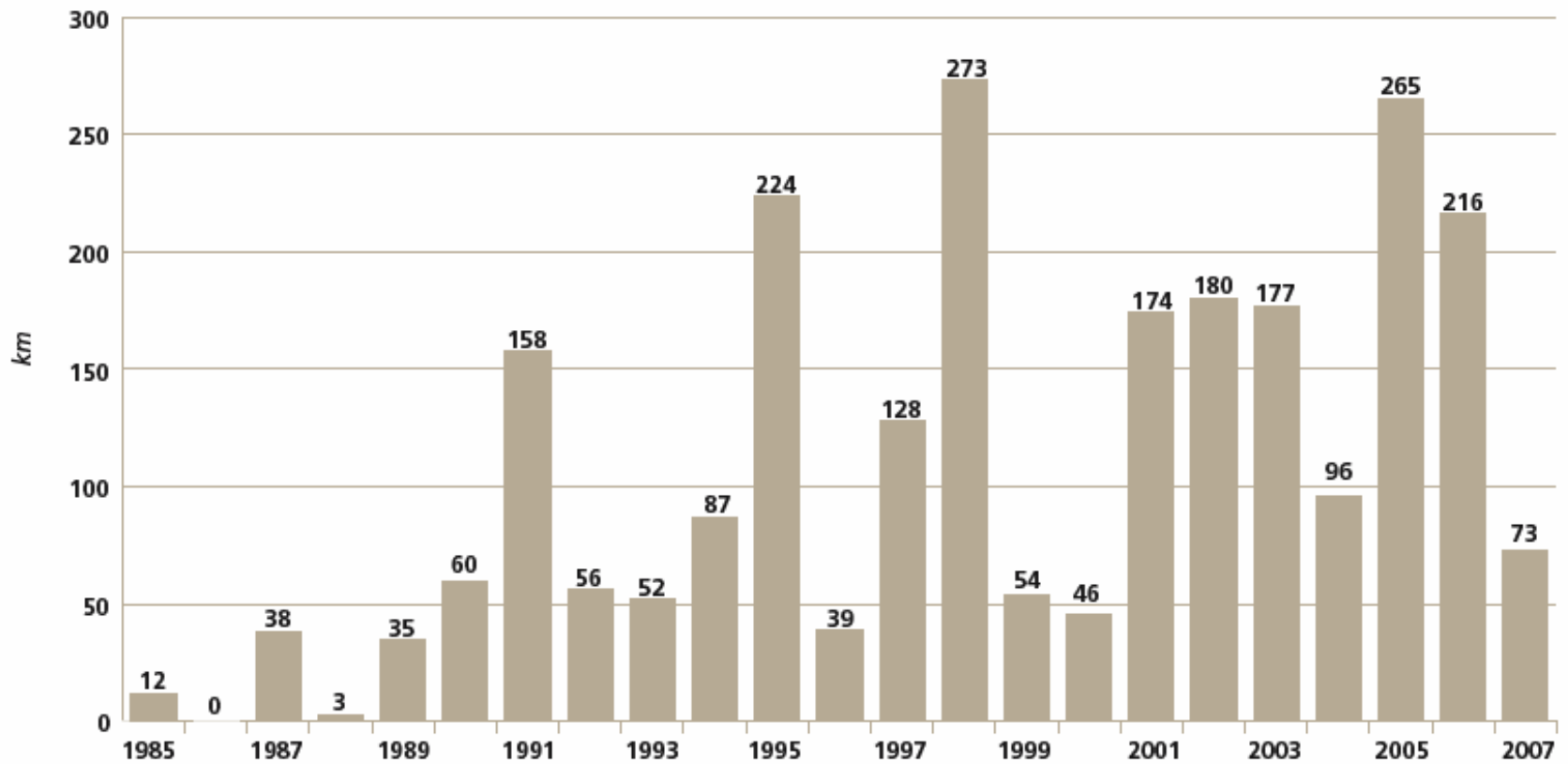


Figure 2. Construction of Portugal's National Motorway System.

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

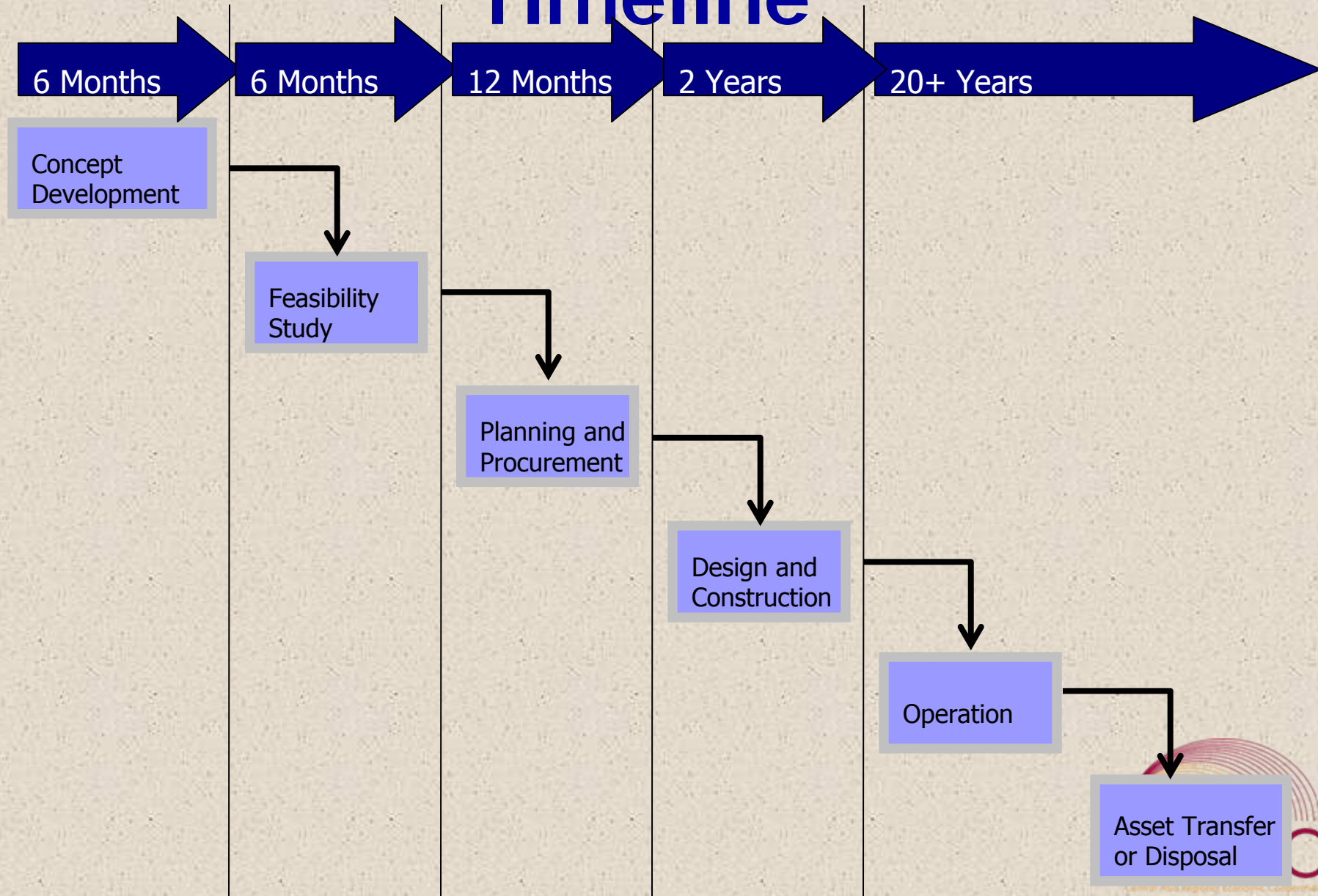
- Allow for adjustment for events outside partners' control.
 - Credit markets
 - Labor markets
 - Construction costs
 - Tax or regulatory changes
- Avoid price fluctuations.
 - Strive for rate equilibrium
 - Limit amount by which rates can grow

Unitary Payments

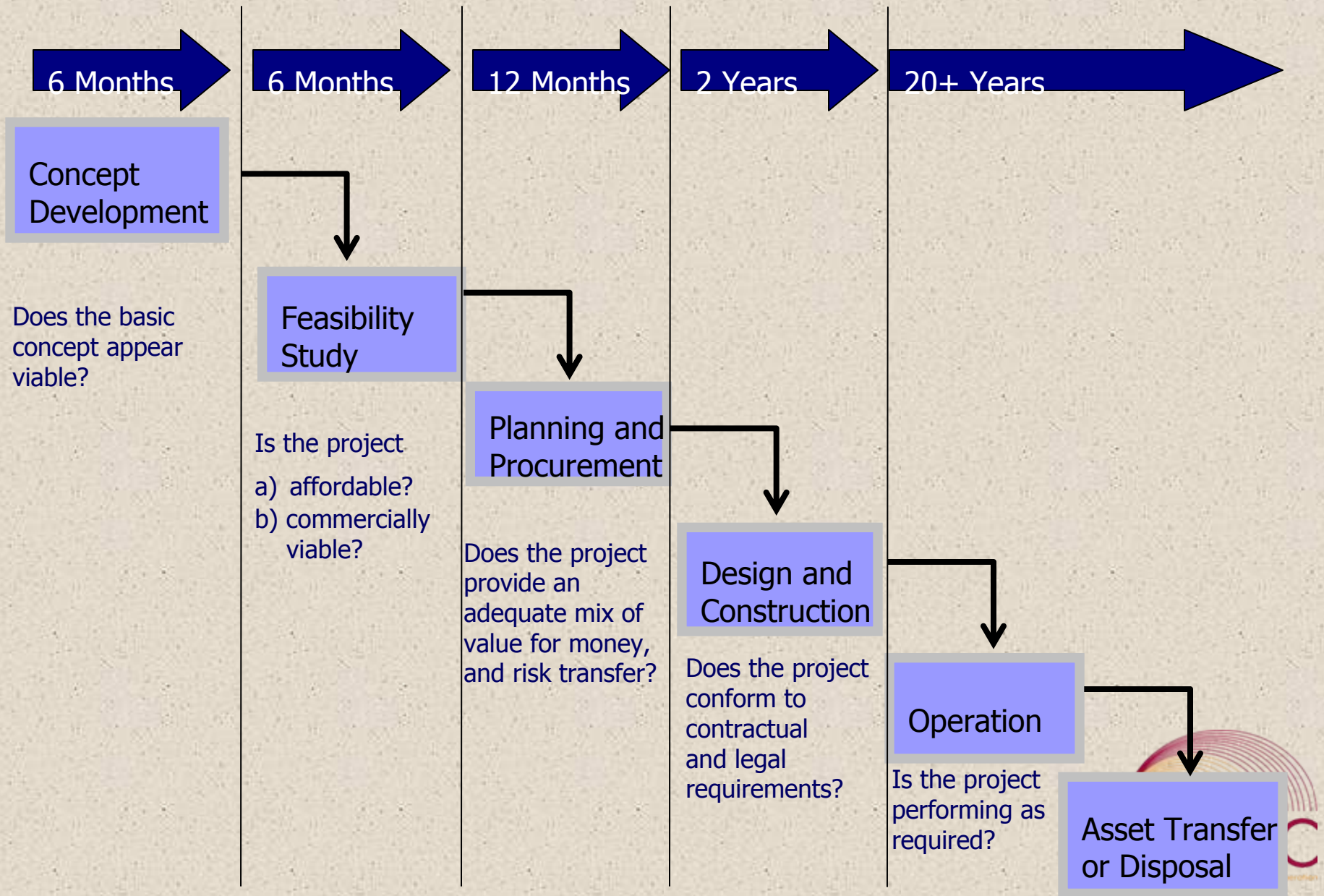
- A unitary payment is a single charge for a totality of service for a defined period of time (e.g., monthly). Payment is based on availability and performance.
- Contract must contain clear definitions of output standards, verifiable through objective measurements.
- Payment begins once project is operations, 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

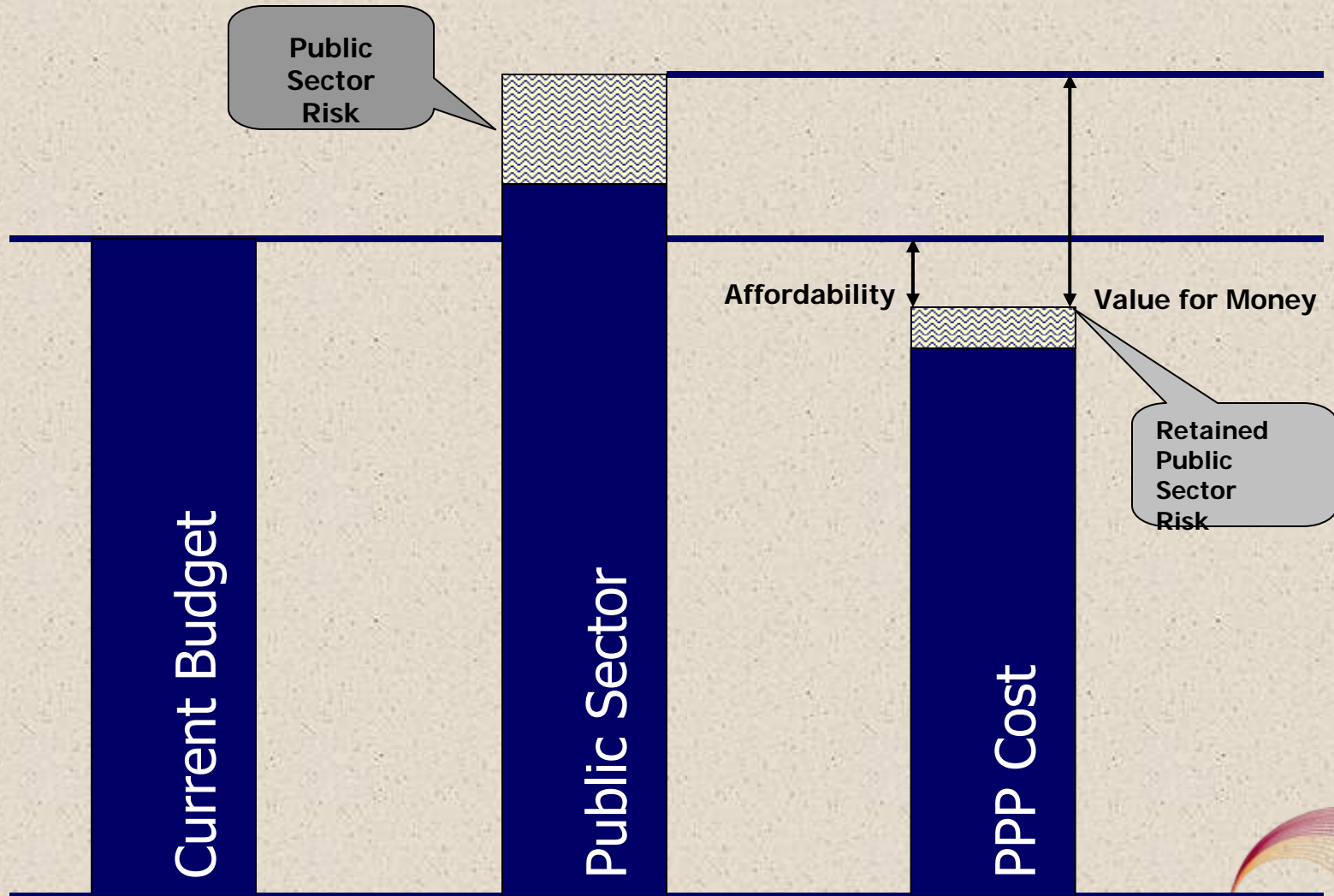
Timeline



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