

## EXECUTIVE SUMMARY

### A. Context

Before the Asian financial crisis, it was becoming clear that private sector participation (PSP) in the roads sector was proving problematic. The crisis has reinforced this, and brought about a withdrawal of investor confidence. There is broad agreement that countries must now develop a clear strategy, with four pillars:

- The environment for PSP must be improved.
- Government must determine sector priorities and identify a pipeline of PSP projects.
- The full range of PSP modalities must be deployed, not just build-operate-transfer (BOT).
- The procurement, implementation and operational processes must be improved.

Since the crisis, much is changing, and ADB is taking a leading role in assisting its developing member countries (DMCs). This is greatly welcomed by governments and the private sector alike.

### B. BOT Project Experience

In Asia, BOT projects have been synonymous with PSP. After more than a decade of concerted effort, however, implementation experience has not matched expectations:

- Surprisingly little has been implemented — just 20 projects are operational in Asia outside the People's Republic of China (PRC).<sup>1</sup>
- Those projects implemented have usually required substantial, unexpected government support (the crisis is bringing home the impact of contingent guarantees). Very few projects are profitable on a stand-alone basis without substantial government support.
- Projects have had unexpected adverse impacts sometimes contrary to government policy. In particular, they have led to a concentration of government support in and near the capital cities, and along existing major corridors.
- Their cumulative impact upon the problems of the roads sector has been small. Most BOT projects have been concentrated where traffic is high, and PSP has had little impact on problems elsewhere.
- There has been concern that financial objectives have been the sole determinant of what happens, to the detriment of development and social objectives.

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<sup>1</sup> Many more are operational in PRC, which is different for known reasons — see Appendix 2.

- There has been concern that corruption, nepotism and cronyism have sometimes reduced the prospective benefits for road users.

However, much has been learned, and there have been beacons of innovation. This report brings all the international experience together, and recommends best practices.

## **C. Towards Best Practices**

### **1. Need for a Process**

Developing a pipeline of PSP projects in the roads sector requires government to determine a process, which comprises the following activities, at two different levels:

#### **a. Sector Level**

- Preparing the PSP environment — legal, regulatory, and contractual.
- Identifying PSP projects in the context of a transport strategy and the realistic level of public sector support necessary, both investment and contingent investment.

#### **b. Project Level**

- Preparing a business case for each project, to establish the basis for bidding, and confirm this is acceptable to government.
- Securing competitive bids and negotiations leading to bid award.
- Providing support and enforcing the concession agreement during construction.
- Enforcing the concession agreement and regulating effectively during the concession period.

The economic crisis has reinforced on governments the need for increased transparency in the PSP process, and increased rigor in project preparation since they are now faced with a better informed, and more cautious investment community. Governments are likely to need assistance until this demanding process is established both at the roads sector level and more generally in structuring the PSP environment.

### **2. The PSP Environment**

#### **a. Country Conditions**

Not all countries are suited to PSP, and particularly to major BOT projects. PSP is likely to be favored in countries where there is:

- Political leadership and commitment to a PSP policy.
- Political stability.

- An existing income level which is not low - and preferably an income distribution which is equitable.<sup>2</sup>
- A sound macro-economy, creating increasing output and real income growth.
- Low and stable inflation.
- A stable exchange rate.
- Domestic capital markets capable of providing domestic financing.
- A program of concession projects to build private sector confidence. This will also allow the government and the private sector to spread the learning-curve costs.

The absence of any one of these features may not hinder the prospects for PSP, but a country lacking points two or three will likely struggle to introduce effective PSP.

### **b. Project Characteristics**

Some types of projects are more likely to be implemented and financed than others. Broadly speaking, the implementation and financing challenge increases with the size and complexity of the PSP option (Table 1) and the challenge for government increases similarly.

For many countries, the entry route into PSP in roads should be through maintenance and operating concessions. This allows the private sector and government to become familiar with performance-based contracting, and offers the prospect of tackling the maintenance and rehabilitation problems, common in many countries.

The focus of most countries to date has, however, been on BOT expressways. Many of these have not been financially successful. The characteristics favoring private financing of major BOT expressways are as follows:

- Projects down existing heavily-trafficked/congested corridors, or where there are missing links in the network, e.g., estuarial crossings or tunnels. This maximizes traffic prospects on opening, and minimizes land/relocation costs.
- Inter-urban, as opposed to urban projects. This keeps the implementation problems and cost relatively low, reduces the traffic risk, and is likely to be effective in tackling traffic congestion.
- Elevated or preferably at-grade alignments in cities, and at-grade construction for interurban projects. This keeps construction costs low.

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<sup>2</sup> This is important because:

- As country income increases project benefits and revenues increase proportionately, but costs much less so. The result is that project profitability increases, and the need for government support reduces.
- Conversely, low-income countries require substantial government support, yet are unlikely to be able to provide it rationally because other projects should often have higher public investment priority.
- Where income distribution is equitable, car ownership and use increases.

- Projects in middle-income developing countries, preferably with an equitable income distribution. Here the willingness-to-pay tolls and the prospects for traffic growth exist.
- Tariffs close to revenue-maximizing, and with an appropriate tariff escalation formula that allows potential revenues to be captured over time, for the main vehicle classes.
- Projects with an existing income stream, e.g., from an existing estuarial crossing/tunnel, or an existing public sector expressway. This is hugely beneficial to financing.
- A project that has been well prepared — in technical terms, in securing planning consents and in proving the feasibility of land acquisition — thereby reducing implementation risks.
- A large project, which recognizes the high fixed bidding costs associated with BOT projects.

### **3. Preparing the PSP Environment**

Political leadership is essential. Institutions may need to be restructured, with the objectives of controlling the PSP process in the public interest, avoiding tendencies for corruption or empire building, and creating a regulatory body, separate from vested sector interests.

The core requirements are:

- Developing an acceptable PSP legal framework — the exact nature of which will be country specific.
- Securing competition *for* the market. Government should identify good projects and then subject those to competitive bidding (rather than the widespread existing practice of accepting unsolicited bids). Where unsolicited bids are accepted, they should be subject to realistic competition.
- Securing competition *in* the market. This requires:
  - Legally-binding concession agreements which set out clearly the rights and obligations of all parties, and the procedures to be followed in the case of unforeseen events.
  - Establishment of an autonomous and independent regulator which is also accountable. This is likely to be in government, but quite separate from vested sector interests.
  - Encouragement of user groups, maybe empowered through an ombudsman function, to exert pressure on infrastructure providers.
- Granting concessions only after government has determined they are clearly in the public interest, and can be revoked if this is not met.

Multi-lateral support for government is likely to be beneficial in implementation. A model that has worked well combines a multi-sector PSP Center with PSP cells in the main line agencies. The main PSP Center has the brief to assist line agencies prepare, market and negotiate projects, and is staffed accordingly.

#### 4. Identifying PSP Projects

This is a government function, which must take place in the right institutional setting if the results are to be accepted and implemented.

Priority projects must be identified in the context of a transport (or roads) strategy,<sup>3</sup> in a two-stage process.

##### a. Prepare Transport (or Roads) Strategy

This is required to:

- Be acceptable, which means that all affected stakeholders should be involved in its preparation.
- Identify the package of policies and priority projects which best promote development objectives, given an assessment of existing problems and available future public funds.
- Specifically, highlight those projects/programs which may be implemented under PSP arrangements, having regard to strategic objectives and the range of PSP options available (see Table 1).

**Table 1: The PSP Options**

Strategy Objective	Maintenance	Turnkey	Maintain & Operate	Rehabilitate-Operate-Transfer (ROT)	BOT	Corridor Management
New source of funds			o	o	o	o
Major capacity increase (new road)		o			o	o
Improved maintenance	o		o	o		o
Rehabilitation of existing roads				o		

<sup>3</sup> A transport strategy is normally required for cities, and inter-urban corridors where modal competition can be effective

## **b. Identify Priority PSP Projects**

Government must prepare feasibility studies, which will allow it to commit to specific projects. Again, the institutional setting is central to achieving acceptability, and requires the participation of the key stakeholders.

This form of feasibility study requires:

- A focus on optimizing the project specification, and delivering a project with robust characteristics. Specifically, the potential of the project to promote development, social, and environmental objectives, as well as economic efficiency, should be addressed.
- Tariff policy should be set in the light of government objectives.
- A focus on implementability and financing.
- A scope including all those activities which affect government's decision as to whether to go ahead (technical, economic, financial, institutional, legal, and land).

## **5. Preparing the Business Case**

This is required in order to confirm the decision to let the project, and identify the terms of the bidding in the knowledge of the likely market response; hence contact with potential bidders is necessary. This in-depth analysis should:

- Establish the project financial structure.
- Identify the nature and scale of all the project risks.
- Define the balance between government support and provisions (such as defined tariffs) to secure specific government objectives.
- Allocate risks between government and the concession company. Experience suggests the allocation in Table 2 is likely to be appropriate at a general level.
- Define the provisions for unforeseen events and specify the procedures for renegotiation.
- Confirm that the proposed allocation of risks and government support are likely to attract serious bids.

**Table 2: Risk Allocation**

<b>Risk</b>	<b>Responsibility of Government</b>	<b>Responsibility of Concession Company</b>
Completion		
– Land acquisition/permissions	Ö	
– Design		Ö
– Construction time/cost		Ö
Commercial – operations and maintenance cost		Ö
Commercial – Traffic Revenue	Joint, government sharing in 'super-profits', and providing downside guarantees <sup>4</sup>	
Financing	(government support)	Agreed with the banks
Devaluation and Inflation	Ö	Ö
Default and Force Majeure		
– By Concession Company		Ö
– By Government	Ö	

The Government should not normally be an equity holder in the project company, as the parties have different interests. Rather, the concession agreement should foster common views, by revenue sharing and provision for project extensions.

## **6. Securing Competitive Bids, Negotiation and Award**

The basis for bidding follows directly from the business case. International marketing to potential investors may be necessary to maximize market interest. Success in attracting serious bidders requires the existence of an acceptable PSP process, realism in the balance of risks and rewards offered, confidence in the Government resulting from its past performance, and good timing, given the external macro-economic environment.

It is necessary to establish a clear bidding and negotiating process:

- The project requirements need to be specified closely, to ensure that evaluation of bids are equitable.
- The Government support should be defined, where necessary as a maximum - rather than held back for negotiation. This allows the private sector to prepare realistic bids, and helps to avoid failed bids.
- The Government should have access to expert advice during the entire process, from preparation of bid documentation through to contract signature. The private sector will have such advice and governments need to be equally well prepared.

<sup>4</sup> This is likely to be particularly necessary for projects on green-field sites.

- There is merit in having simple evaluation criteria - for example, bidding at defined tariffs to minimize the level of government investment required since it gives transparent decisions.
- Conforming and non-conforming bids should be allowed, in order to foster private sector innovation.

Government should establish whether and to what extent PSP projects achieve value-for-money, by comparing costs with the best public sector alternative. Government should also seek to establish, through before-and-after audits, how expectations are matched by reality - as a basis for continuous improvements to the PSP process.

## **7. Supporting Implementation and Operations**

Government should be proactive during this period, with the objective of maximizing the success of the project. Government will administer the concession contract, and regulate on an agreed basis in the public interest. When unforeseen circumstances occur, government must follow the procedures set out in the concession agreement.

### **D. Prospects and Role for ADB**

#### **1. Future Prospects**

The potential for improvement in the roads sector is large. What may be achievable in the next 5-10 years? While every situation is different, something along the following lines will often be sought in Asian countries:

- Improvement in the PSP environment - legal, institutional and regulatory.
- The institutionalization within government of PSP procurement process and skills.
- Development, within government, of an effective transport strategy and project identification process.
- Improved preparation of BOT projects, to meet the more demanding requirements of investors.
- A widespread understanding, through education and application, of the different PSP options which can be effective in the sector.
- A progressive transfer of maintenance activity under performance-based management contracts with the private sector.
- Looking further ahead, the direction is towards greater commercialization of the roads sector. It does not seem to be unrealistic to expect the main road system to be packaged into areas or corridors, for management, maintenance and improvement under performance-based contracts. The contracts will be with private sector companies and will have required those companies to develop new skills. This will become a major private sector industry, focused on both the implementation of new projects, and the management of the road system.

## 2. Role for ADB

There is widespread recognition by government technocrats and private sector players, that ADB needs to be increasingly involved in this area. The government requires technical assistance to restructure and reshape policy, as well as funding and other support. The private sector requires technical assistance support to secure financing arrangements and to appreciate that ADB assistance can help government to determine sector policy. This offers encouragement for ADB policy that already exists.

The five areas for ADB assistance are to:

- Prepare the environment and procurement process for PSP.
- Broaden the understanding of the range of PSP options that exists in the roads sector. Most options are currently not applied, and they provide an undoubted opportunity, as experience elsewhere demonstrates. In particular, they tackle the problems of maintenance and rehabilitation, which underlie the problems of the roads sector in most countries.
- Assist with transport strategy formulation. This is necessary for identifying priority PSP projects. It requires coordination with other donors to create the necessary institutional setting for sound strategy development, and its widespread acceptance.
- Assist to identify priority projects for joint public-private funding (so-called hybrid projects). It is not yet clear how the different imperatives of ADB and the private sector can best be combined, when faced with an uncertain environment. Experimentation is required to establish how this is best achieved.
- Invest in projects through ADB's public and private sector windows, and where appropriate, provide guarantees. These activities are widely recognized to leverage substantial additional funds in projects that ADB has determined are sound investments.